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1995

San Francisco

Congestion Management Program

MOVING THE CITY
SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

Prepared by the

San Francisco County Transportation Authority

October 10, 1995

Table of Contents

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Chapter 1 - Background and Program Overview

1. Background 1
    - Purpose of the Document 1
    - Origins and Intent of the CMP Legislation 2
2. Congestion Management In San Francisco 3
    - Applicability of the Concept 3
    - The City's Congestion Management Track Record 4
    - Future Strategies 4
3. Program Overview 5
    - A. Mandated Program Components 5
    - B. Changes to Transportation Fund Programming 6
    - C. Relationship to Ongoing Planning and Programming Efforts 6
    - D. Coordination and Public Input 7

Chapter 2 - Congestion Management Agency

1. Legislative Requirements 9
2. Legislative Intent and Application to 9
San Francisco 9
3. The San Francisco County Transportation Authority 9
    - a. Designation and Composition 9
    - b. Roles and Responsibilities 9
    - c. Implications of the Board's Multiple Roles 10
    - d. Relationship to City Agencies 10
    - e. Relationship to Regional Planning/Programming Agencies 11

Chapter 3 - CMP-Designated Roadway Network

1. Legislative Requirements 13
2. Legislative Intent and Application to San Francisco 13
3. San Francisco CMP Roadways 13
    - a. Selection Criteria 13
    - b. Current Network 14
    - c. Proposed Changes - Rationale 17
    - d. Relationship to the MTS 17
4. Work Program Items - Key Milestones 18

Chapter 4 - Roadway Level of Service Monitoring

1. Legislative Requirements 19
2. Legislative Intent and Application to San Francisco 19
3. Technical Approach 20
    - a. LOS Standard 20
    - b. Methodology 20
    - c. Network Segmentation Documentation of Method and Criteria 21
4. Monitoring Results 22
5. Future Monitoring Approach 28

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6. Caltrans' Role 28
7. Work Program Items - Key Milestones....................28

Chapter 5 - Multimodal Performance Measures

1. Legislative Requirements 31
2. Legislative Intent and Application to San Francisco....................31
3. Multimodal Performance and Mobility 31
4. Uses of Multimodal Performance Measures....................32
5. Methodology for Performance Evaluation 32
6. Work Program Items - Key Milestones....................39

Chapter 6 - Trip Reduction Element

1. Legislative Requirements 41
2. Legislative Intent and Application to San Francisco....................41
3. City Policy Framework 42
    A. Objectives and Policies in the General Plan....................42
    B.Existing City Ordinances....................43
4. Housing And Employment Balance....................47
5. Relationship Of Travel Demand Management Activities To Air Quality Improvement Efforts....................48
    A. Transportation Control Measures....................48
    B. Regulation 13, Rule 1 (BAAQMD) -....................49
    San Francisco's Demonstration of Compliance 49
6. Work Program Items - Key Milestones....................50

Chapter 7 - Land Use Impacts Analysis Program

1. Legislative Requirements 51
2. Legislative Intent and Application to San Francisco....................51
3. Existing Setting 52
4. Institutional Framework....................52
5. Land Use and Transportation Analysis 53
    a. Current Practice....................53
    b. Comparison of Local and CMP Impact Analysis Levels....................54
    c. CMP Land Use Impacts Analysis - Methodology Development 54
    d. Timetable for Implementation and Interim Approach....................55
6. Implications of CMP Requirements....................55
7. Work Program Items - Key Milestones....................56

Chapter 8 - Capital Improvement Program

1. Legislative Requirements 57
2. Legislative Intent and Application to San Francisco....................57
3. Transportation Investment and System Performance 58
4. CIP Components....................59
5. Relationship to Other Plans and Programming Documents 59
    5.1. Relationship to the CountywideLong-Range Transportation Plan .59
    5.2. Relationship to the Proposition B Strategic Plan....................60

DRAFT

    5.3. Relationship to the RTP 60
    5.4. Relationship to the RTIP 60
    5.5. Relationship to the San Francisco Master Plan 61
    5.6. Relationship to City Department Activities 61
    5.7 Relationship to Short Range Transit Plans 61
6. The Authority's Capital Priorities Programming Process 63
    6.1. CIP Development - Schedule 63
7. CIP Review and Amendment Procedures 64
    7.1. Applicability 64
    7.2. Kinds of Amendments 65
    7.3. Requirements for Submittal of CIP Amendment Requests 66
    7.4. The Authority's Review Process 66
    7.5. Adjustments to Prop. B Strategic Plan 68
    7.6. Notification of Programming Agencies 68
8. CIP Project Lists 68
9. Program Overview 68

Chapter 9 - Deficiency Plans

1. Legislative Requirements 73
2. Legislative Intent and Application to San Francisco 73
    2.1 Deficiency Plans: What They Are 74
    2.2 Applicability to San Francisco and Relationship to Other Analyses 75
    2.3 CMP Multimodal Network & Performance Monitoring 75
3.0 Overview 76
    Exhibit 1. Deficiency Detection and City Notification 76
    Exhibit 2. Deficiency Analysis and Mitigation Plan Preparation 76
    Exhibit 3. Deficiency Plan Evaluation and Approval 77
4.0 Deficiency Planning Process 81
    4.1 Deficiency Detection & Designation of Lead Department 81
    4.2 Deficiency Plan Preparation and Approval 82
    4.3 Deficiency Plan Action List Preparation 84
    4.4 Implementation Plan 86
5.0 Special Issues 88
    5.1 Multi-County Deficiency Plans 88
    5.2 Deficiency Plans Addressing Multiple Deficiencies 88
    5.3 Future Deficiencies 89
Work Program Items - Key Milestones 91

Chapter 10 - Travel Analysis Database

1. Legislative Requirements 92
2. Legislative Intent and Application to San Francisco 92
3. Methodology and Guidelines 92
    a. Methodology 92
    b. Guidelines 94
4. Timetable for Implementation and Interim Approach 94
5. Work Program Items - Key Milestones 94

CHAPTER 1

BACKGROUND AND PROGRAM OVERVIEW

Key Topics:

- **Background**
- **Congestion Management in San Francisco**
- **Program Overview**

1. Background

Purpose of the Document

The 1995 San Francisco Congestion Management Program document is designed to serve the following purposes:

i. Comply with state law requiring biennial adoption of a Congestion Management Program (CMP) and submittal to the Metropolitan Transportation Commission for a finding of conformance. A conformance finding ensures the City's continued eligibility for additional state fuel tax revenues authorized by CMP legislation, as well as state and federal funding eligibility for key transportation projects.

ii. Serve as the main and most current reference and guidance document for San Francisco agencies involved in activities related to congestion management.

iii. Serve as the basis for the congestion management work program and schedule to be followed during fiscal years 1995-6 and 1996-7 to develop specific technical or policy guidance in areas of the Program that require it.

iv. Establish and describe interim policies, procedures, or methods to be used until final guidance is available as described in iii) above.

v. Serve as the main description of the 1995 San Francisco CMP, to be used as the basis for determining the appropriate level of environmental evaluation and developing the environmental document for the Program.

Document Organization and Approach

The document in organized in chapters following MTC guidance of December 26, 1990 and March 22, 1995, with a separate chapter devoted to each of the elements required by the CMP legislation. For the complete text of MTC's guidance please refer to Appendix I. The text of the 1993 San Francisco CMP was used as a general guide, and was retained where still current.

For each chapter where technical issues require further development there is an introductory section describing the issues yet to be resolved, followed by a section detailing interim procedures. A final section lists work program items and describes the proposed approach for developing final methods or further guidance. Because the CMP is now a biennial document, final procedures developed during fiscal years 1995-6 and 1996-7 will be adopted by the Authority Board as amendments to expand or supersede the appropriate sections of the 1995 San Francisco CMP, and will go into effect after Board adoption.

Development of this CMP document update was primarily the responsibility of the Authority. The information in Chapter 4: Level of Service Monitoring is extracted from the report prepared by Abrams Associates, which conducted the monitoring of the CMP network. That report is available from the Authority as a separate publication. The Department of City Planning contributed to the chapter on Trip Reduction and Travel Demand. Further review and comment was provided by other City departments, the Authority's Citizens' Advisory Committee, the Metropolitan Transportation Commission, transit operators, the Bay Area Air Quality Management District, and Caltrans.

Origins and Intent of the CMP Legislation

The requirements for a Congestion Management Program were established in 1989 as part of a bi-partisan state legislative package, known as the Katz-Kopp-Baker-Campbell Transportation Blueprint for the Twenty-First Century (AB 471). The actual requirements for CMPs became effective when voters approved Proposition 111 on June 5, 1990. Changes and modifications to clarify various aspects of CMP law were introduced by AB 1963 in September 1994. For the complete text of the CMP legislation, see Appendix II.

The state legislation not only provides for increases in transportation funding, but also makes significant changes in the requirements for planning and programming of transportation projects to be funded from these sources of revenue. The goal of the legislation is to tie transportation funding decisions to measurable traffic congestion relief, local land use decisions and their impact on the transportation system, and implementation of transportation control measures to meet air quality goals.

The CMP requirements are the legislature's response to the growing traffic congestion phenomenon experienced by all urbanized areas in California. It is widely perceived that traffic congestion is outpacing the traditional transportation planning process in its ability to provide adequate solutions. In San Francisco, with its high-intensity land uses and extensive transit network, this traffic congestion phenomenon manifests itself differently, posing challenges to the interpretation of the CMP mandate in the city, but for the majority of the state's highly suburbanized metropolitan areas it is a reality, and it has its roots in the following four facts:

a. The currently prevalent low-density suburban growth pattern throughout the state's metropolitan areas does not lend itself easily to cost-effective transit service and is therefore highly dependent on the automobile and on the freeway system; (in short: *transit does not work well in the suburbs.*)

b. Because of the political volatility of pricing strategies (e.g., tolls, paid parking at work sites) and the limited success of ridesharing strategies (i.e., carpooling and vanpooling) in sprawled suburbs, most automobiles still carry just one person, regardless of trip purpose or time of day, so that any new roadway facilities that are built are, by definition, inefficient: even when full of *cars* they carry only a fraction of the number of *people* they could accommodate; (in short: *freeways full of solo drivers shortchange the carrying capacity of the investment.*)

c. These high-cost facilities, which are designed for the automobile but do not maximize the number of *people* carried, result in a high cost per person transported; (in short: *building freeways to address transportation demand is not cost-effective*)

d. Because of the scarcity of land for transportation facilities, rising construction costs, and environmental and air quality constraints, ever growing levels of capital investment are needed in order to build roadways. This, combined with a deteriorating economy and continuing erosion of transportation funding, results in fewer and fewer new miles of roadway facilities being built every year to address a growing demand for transportation; (in short: *it's hard to keep up with transportation demand by building freeways, and we can't afford them either)*

For most of suburbanized California the inability to keep up with transportation demand lends credibility to the prospect of land development coming to a halt because of increasing traffic congestion and deteriorating accessibility. Consequently, the CMP legislation aims at extracting more productivity out of the existing transportation infrastructure while encouraging more efficient use of scarce new dollars for transportation investment, with the intended result of fending off congestion, improving air quality, and ultimately allowing continued land development where feasible. In order to achieve this, the CMP law mandates a coordinated strategy based on five main concepts:

a. Require more coordination between federal, state, regional and local agencies involved in the planning, programming, and delivery of transportation projects, programs, and services;

b. Favor transportation investments that provide measurable and quick congestion relief;

c. Create a definite link between local land use decisions and their effect on the transportation system

d. Favor transportation solutions that are less dependent on the single-occupant automobile, and improve air quality;

e. Place emphasis on local coordination and responsibility by requiring the designation of a Congestion Management Agency in each urban county in the state.

2. Congestion Management In San Francisco

Applicability of the Concept

The main impetus for the CMP legislation derives from worsening *suburban* transportation conditions, caused by land use patterns that perpetuate over-reliance on the private automobile. Although land redevelopment opportunities exist, San Francisco is essentially a built out city, with an extensive transit network and long standing policies and programs to encourage a balance and truly multimodal transportation system. It is therefore necessary to, within the constraints of State law, reinterpret congestion management goals and requirements so that they work for San Francisco. The City's "transit first" policy, for instance, presents a challenge to CMP implementation: in San Francisco we tolerate a certain level of traffic congestion in order to encourage transit ridership. The San Francisco Master Plan specifically discourages roadway capacity increases, stating that:

> "The existing vehicular capacity of the bridges, highways and freeways entering the city should not be increased and should be reduced where possible." (SF Master Plan, Transportation Element, Objective 5, Policy 3).

Congestion management concepts may be at odds with this policy approach if we interpret congestion management as requiring improvements to the throughput of *cars* in the roadway network. However, if we rethink congestion management as maximizing *people* throughput, that is, if we re-interpret congestion management requirements as an opportunity to improve overall mobility in the city, then we have opportunities to capitalize on the city's significant supply of transit services, and on its relatively pedestrian-friendly environment. San Francisco can show good performance in achieving congestion management goals if the measures used in determining performance are relevant to the city's transportation and land use realities. Congestion Management Program activities for the next two fiscal years will include the identification of issues such as this one, which can be pursued as part of the Authority's agenda for legislative change.

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The City's Congestion Management Track Record

San Francisco has had considerable success in managing travel demand, especially with respect to control of automobile access to the downtown area during peak commute times. Many of the transportation demand management and land use regulation measures described in Chapters 6 and 7 of this document have been in place over the last twenty years and have allowed major growth in downtown trip-making without significant deterioration in operating conditions (or traffic levels of service) for downtown streets.

It is clear that this success is the result of the *combined* application of several major policies, in particular:

- parking pricing and supply policies which discourage driving into downtown;
- transit service investment policies to provide and maintain local travel options that are *truly competitive* with the private automobile; and
- land development policies that gave transportation system investments a chance to keep pace with the growth in trip-making.

In addition to these policies, there were other factors that were essential to the City's ability to absorb the extraordinary levels of employment growth experienced between 1970 and 1985. Such factors include:

- *the City's historic record of investment in local public transit* - The existence of high levels of transit service and coverage within the city provided a credible option to driving, and made politically viable the application of parking pricing policies, and development impact mitigation fees;
- *the BART system and the demographics of downtown employment* - A large portion of employment growth in this period was absorbed by suburban residents. The opening of BART in 1973 constituted a major expansion to transit capacity with two key features: a) excellent regional access to stations within walking distance of most downtown employment locations, and b) no financial burden to the city for providing adequate transit coverage at the residential (suburban) end of the BART trip; and
- *the City's investment in its street system* - It is seldom recognized that San Francisco's dense grid of streets and arterials is a major transportation asset, providing multiple travel route options, keeping local trips from clogging the freeway system (as is so often the case in the suburbs) and enhancing the system's ability to recover quickly when congestion problems occur.

The City's winning strategy was a truly multi-modal transportation strategy, which allowed each travel market to be served by the transportation modes best suited for it.

Future Strategies

The above discussion of the City's track record highlights the importance of maintaining travel *options* as an essential strategy not just to prevent a worsening of congestion but also to improve mobility.

No less significant in charting future action is a sound understanding of demographic trends. Reflecting changes in the economic structure of the region, as well as national trends, the development boom that characterized the growth of the City's downtown area in the 1970's and 1980's has been replaced by modest employment growth. San Francisco residents are out-commuting in increasing numbers to take advantage of work opportunities in other Bay Area counties: today the number of San Francisco residents traveling daily to work in Santa Clara County is larger than the number of Santa Clara County residents employed in San Francisco. Commute times by transit for San Francisco residents are increasing, and so is automobile ownership in the city. In fact about half of all drive-alone work trips into downtown come from within San Francisco. These are disturbing trends at a time when the fiscal crisis at the State and local governments is resulting in curtailment of funding for transit operating expenses. As transit faces these problems, enriching the City's inventory of available transportation options will be a key strategy for congestion management in San Francisco.

Maintaining transit service levels is essential to ensure that transit remains a viable option to the private automobile, but there are significant travel markets within the City which are only marginally suited for transit service and cannot be captured by transit without major operating expense. Other trips simply cannot be attracted to transit. Ridesharing (carpooling) strategies and non-traditional transit options (zonal express bus service, demand responsive, etc.) may need to be explored as alternatives to drive-alone in some of these cases.

In addition to ensuring compliance with the State's congestion management requirements, improvement of congestion conditions on city streets is necessary to avoid further deterioration of transit travel times. Therefore, San Francisco's congestion management activities will also need to focus on key improvements to congested roadway facilities. Whereas the program's primary emphasis on transit reinvestment, with new service proposed in redeveloping areas, is not in question, street and roadway reinvestment will not be neglected. Particular attention will be paid to projects that improve the operating efficiency of the existing system, such as interconnection of traffic signals to improve vehicular traffic flow, or signal pre-emption to improve the operating speed and reliability of transit vehicles. These projects will be necessary not only to ensure that the current level of congestion does not worsen, but also to improve overall mobility, and help transit regain operating speed and retain its market share.

Congestion management activities during the next two fiscal years will include continued development of Strategic Analysis Reports (SARs). These are policy-level thought pieces aimed at facilitating policy-making relative to congestion management by describing systemic congestion, and analyzing likely transportation outcomes taking into account factors such as transportation investment decisions, and transit funding and service policies. SARs are action-oriented documents used, for instance, to systematically identify potential travel markets, such as those described above, matching them with transportation options most likely to effectively serve them, and estimating their potential impact in alleviating congestion levels. Chapter 2 discusses the proposed role of SARs in fostering early coordination by City Departments so that certain congestion management-related actions may be evaluated before they are implemented. Chapter 9 addresses the proposed use of SARs in the Deficiency Plan process. SARs could be developed on topics as wide-ranging as the congestion reduction potential of parking supply and pricing policies; alternative ways to measure congestion relief and mobility benefits for city residents, and the potential congestion management implications of implementation of the Americans with Disabilities Act. The number of SARs to be developed over the next two fiscal years will depend on the need for information to support policy-making, and on the level of effort required by the complexity of the topics chosen.

Further work to improve the measurement of performance of the multimodal system, further organize the deficiency planning process, and analyze CIP changes, are discussed in Chapters 5, 9, and 8 respectively.

Program Overview

A. Mandated Program Components

The overall strategy embodied in the CMP legislation translates into the following statutory requirements, to be met by all urban counties in the state:

1. Development and adoption of the initial CMP and biennial updates. The CMP document must contain the following elements, which are addressed at length in the remaining chapters of this report:

   - A designated CMP roadway network
   - Traffic level of service (LOS) standards and a methodology for monitoring LOS on the designated CMP roadway network
   - Transit service standards
   - A multimodal performance element
   - A land use impact analysis methodology
   - A seven-year multi-modal capital improvement program

2. Development of a common database and method for analysis of impacts of local land use decisions on the CMP network.

3. Designation of a Congestion Management Agency for the county.

B. Changes to Transportation Fund Programming

The CMP legislation included the creation of new funding sources, as well as changes to existing fund programming mechanisms, tied to implementation of CMP requirements. The Authority at the local level and the MTC at the regional level have been empowered to make CMP conformance determinations affecting funding eligibility.

1. State Fuel Tax Increment: The CMP legislation established a 9 cent per gallon increase in the state's fuel tax. In order to receive these revenues, urban counties must annually be found in conformance with CMP requirements as described in A above, particularly the monitoring and reporting on congestion levels in the transportation network, and implementation of required CMP actions designed to avoid a deterioration of circulation conditions on the CMP network. In addition, the CMP document itself must be updated every two years.

2. Flexible congestion relief and urban and commuter rail funds: These funds are programmed through the regional transportation improvement program (RTIP), which is developed and adopted by MTC. In order to be considered for funding through the RTIP, transportation projects must be first included in the Capital Improvement Program of the CMP.

3. Traffic system management funds: Projects that are included in the capital improvement program of the approved CMP receive first priority for Traffic System Management funds, programmed annually by Caltrans.

4. Federal Surface Transportation Program (STP) and Congestion Management and Air Quality (CMAQ) Program Funds: In 1992, the California legislature passed SB 1435, which reconciled the CMP programming process with the new Federal Intermodal Surface Transportation and Efficiency Act (ISTEA). As a result, projects seeking STP or CMAQ funds must first be prioritized by each Congestion Management Agency as part of the development of their biennial Capital Improvement Program for the CMP.

C. Relationship to Ongoing Planning and Programming Efforts

Congestion management programs are a component of a larger set of ongoing transportation planning and programming efforts at the local and regional levels. The following documents are closely tied to the development and implementation of San Francisco's CMP:

1. Regional Transportation Plan (RTP): The CMP is instrumental in implementing the local portion of the regional transportation plan and must be consistent with it. MTC determines consistency among CMPs in the region. MTC makes these determinations as a

part of the conformance finding process for CMPs.

2. Regional Transportation Improvement Program (RTIP): A seven-year transportation capital improvements program must be included in the CMP. For certain projects to be included in the RTIP, they must be included in the capital improvement program of the CMP. The CMPs are therefore a main source from which the RTIP's program of projects is derived.

3. City of San Francisco Master Plan: The land use and transportation elements of the City's Master Plan provide information relevant to the CMP, such as road network characteristics and procedures for land use impacts analysis. The Master Plan also provides general information on topics such as transportation demand management measures that are addressed as part of the CMP. Chapter 8 addresses the Planning Department's role in making consistency findings for the CMP's Capital Improvement Program.

   CMP actions and policies may ultimately have an effect on the policies contained in the Master Plan; however, State law does not require that the CMP be incorporated into the Master Plan.

4. Air Quality Attainment Plans: MTC's Regional Transportation Plan is required by federal law to conform to the State Implementation Plan for improvement of air quality. Since the CMP must be found consistent with the Regional Transportation Plan, the CMP must therefore also conform to the provisions of the State Implementation Plan. In addition, the San Francisco CMP documents implementation of transportation control measures (TCMs) included in the 1994 Clean Air Plan adopted by the Bay Area Air Quality Management District pursuant to State requirements.

D. Coordination and Public Input

THIS SECTION UNDER DEVELOPMENT.

CHAPTER 2

CONGESTION MANAGEMENT AGENCY

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **The San Francisco County Transportation Authority**

1. Legislative Requirements

California Government Code section 65089 (a), as amended, states "A congestion management program shall be developed, adopted, and updated biennially, consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the [California] department [of Transportation], and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county." For the complete text of the CMP statutes see Appendix II.

Legislative Intent and Application to San Francisco

One of the main thrusts of the CMP legislation is to foster coordination of local land use and transportation investment decisions at the county or subregional level. In order to ensure local involvement in this process, which turns more complex when the number of local jurisdictions involved increases, the CMP law vests significant authority and responsibility on the Congestion Management Agencies (CMAs). For example, in order to receive state and federal funds, transportation projects in an urban county must now be recommended by that county's CMA as part of its Congestion Management Program. CMAs therefore act as a policy forum and technical resource to guide and help resolve transportation problems within counties when those problems have implications across city boundaries. San Francisco's distinct status as a city and county dictates a somewhat different role for the CMA in this regard, with the focus of involvement shifting to address problems across county lines (such as the effects of regional commute patterns into San Francisco), as well as issues of coordination of city department activities affecting congestion management, such as trip reduction program implementation, or transit service improvements.

3. The San Francisco County Transportation Authority

a. Designation and Composition

On November 6, 1990, the Board of Supervisors designated the San Francisco County Transportation Authority (Authority) as the CMA for the County. The Authority Board of Directors consists of the eleven members of the San Francisco Board of Supervisors, acting as Commissioners.

b. Roles and Responsibilities

The Authority is a special-purpose government agency, created on November 7, 1989, when San Francisco voters passed Proposition B. Proposition B mandated a 1/2 cent increase in the local sales tax for a period of 20 years, to fund San Francisco's transportation projects and services. The Authority is responsible for the administration and strategic prioritization and programming of the revenues generated by Proposition B. Beyond their own purchasing power, these revenues also allow the City to leverage large amounts of State and Federal funds for transportation investments in San Francisco.

In its capacity as the CMA for San Francisco, the Authority has primary responsibilities in the following areas:

- Development and adoption of the biennial CMP document and related implementation guidance,
- Monitoring of City agencies' compliance with CMP requirements,
- Programming of various Federal and State transportation funds, and
- Policy input into the regional transportation planning and programming process.

The Authority's dual responsibilities for strategic programming of Proposition B funds (through the recently completed Strategic Plan) and for prioritization and programming of State and Federal funds through the CMP process, represent a major opportunity for the City to achieve a high degree of coordination in its transportation planning decisions, and to optimize the City's investments in transportation projects and services. The leveraging of State and Federal funds through strategic use of Proposition B monies for the required local match is a good example of how effective this process can be.

In addition, acting as the CMA, the Authority plays a key role in evaluating and providing guidance on major local transportation projects and policies which may affect compliance with congestion management requirements or attainment of CMP standards.

c. Implications of the Board's Multiple Roles

As described above, the San Francisco Board of Supervisors also serves as the Authority's Board, and as the CMA Board. These multiple roles require careful balancing of the Board's responsibilities. Policy decisions made by the Board of Supervisors may have negative congestion management impacts and place the Board, as CMA, in a position to find the City in non-conformance with the CMP. This may in turn generate difficult Proposition B funding choices for the Authority Board.

In order to minimize the potential for conflict, the Authority cannot limit its role to just monitoring CMP conformance after the fact, and must instead take a proactive role to serve as a resource in analyzing the potential congestion management implications of transportation-related actions or policies proposed for the City. Such an approach will allow the Board to better shape the policy outcomes by anticipating potential problems as part of its decision-making process at a time when policy options may still be available, instead of having to react when congestion impacts reach crisis proportions and require hasty funding decisions.

d. Relationship to City Agencies

State law mandates that the Authority, acting as Congestion Management Agency (CMA), must biennially determine if the City is in conformance with the adopted Congestion Management Program. A finding of non-conformance has potentially significant consequences for transportation funding in the City. Also according to state law, it is the City's responsibility to ensure that transportation projects, programs, and services are put in place, through its implementing departments, to maintain conformance with the CMP.

In fulfilling its CMA mandate, the Authority must function as an independent agency to be able to objectively and credibly evaluate CMP conformance. This dictates a special relationship with City departments involved in transportation-related actions which must be assessed at least biennially relative to their congestion management impacts. On the other hand, because of the Board's multiple roles, as described in the previous section, the Authority's approach is to act as a resource, maximizing coordination with the City's departments responsible for planning and implementation of transportation actions, so that such actions may be evaluated for congestion management impacts before they are put in place. The Authority's Strategic Analysis Reports (SARs) are a key component of that coordination function, which involves early identification of potential congestion management problems and opportunities, fostering continued communication with implementing departments, and providing system-level evaluation of proposed actions where appropriate.

e. Relationship to Regional Planning/Programming Agencies

As the Congestion Management Agency for San Francisco, the Authority plays a key liaison role with MTC, the Bay Area's regional transportation planning agency, and with the Bay Area Air Quality Management District (BAAQMD), the agency responsible for implementation and monitoring of the 1994 Clean Air Plan. The Authority serves as the focal point for local input into MTC's Regional Transportation Plan (RTP), which establishes the overall vision for long-range transportation development and funding in the region, and the Regional Transportation Improvements Program (RTIP). Through its membership in the Bay Area Partnership, the Authority plays a key role in shaping the evolution of planning and programming processes affecting San Francisco's ability to capture transportation investments and preserve its economic vitality. Moreover, through its leadership in this forum the Authority is in a position to influence the debate over the vision and goals for transportation planning in the region, bringing to bear San Francisco's special perspective on multi-modalism and mobility.

CHAPTER 3

CMP-DESIGNATED ROADWAY NETWORK

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **San Francisco CMP Roadways**
- **Work Program Items - Key Milestones**

1. Legislative Requirements

California Government Code Section 65089(b)(1)(A) requires that the designated roadway system include at least all state highways and principal arterials. No highway or roadway designated as part of the system shall be removed from the system. No clarification is provided in the statutes as to the definition of "principal arterial."

The statutes also refer to regional transportation systems as part of the required land use impacts analysis program, California Government Code Section 65089(b)(4). In 1991, the Bay Area's Congestion Management Agencies (CMAs) designated Congestion Management Program (CMP) networks in coordination with MTC's development of the Metropolitan Transportation System (MTS). The MTS network, which includes both highways and transit services, was subsequently designated as the Congestion Management System, required by the federal ntermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The Metropolitan Transportation Commission contracted with he congestion management agencies in the Bay Area to help develop the MTS and to use he CMPs to link land use decisions to the MTS. The 1993 CMP therefore makes a distinction between the CMP network used for monitoring conformance with the level of service (LOS) standards, and the MTS, used for the CMP's land use impacts analysis program (see Chapter 6).

2. Legislative Intent and Application to San Francisco

CMP legislation requires the designation of a network of roadways to allow the systematic monitoring of performance in relation to established LOS. The network is also the basis of analysis for estimating the transportation impacts of future actions, be they transportation projects proposed as part of the CMP's Capital Improvement Program (CIP), or land development decisions affecting transportation and air quality conditions in the city. For a discussion of the establishment and monitoring of levels of service on the CMP-designated roadway network see Chapter 4.

3. San Francisco CMP Roadways

CMP legislation requires that all state highways (including freeways) and principal arterials be included in the CMP network. Designation of facilities as part of this network must strike a balance between the cost of biennial monitoring of the network according to mandated methods (see Chapter 4), and the usefulness of the network to track the transportation impacts of land development decisions, as well as to assess the congestion management implications of proposed transportation actions. A network containing numerous local thoroughfares may permit more definitive conclusions about the projected congestion impacts of a specific development project than a network that only includes the freeways, particularly in San Francisco, where most urban traffic occurs on city arterials. The next sections document the network selection criteria and process used in the initial San Francisco CMP in 1991, and describes the current network.

a. Selection Criteria

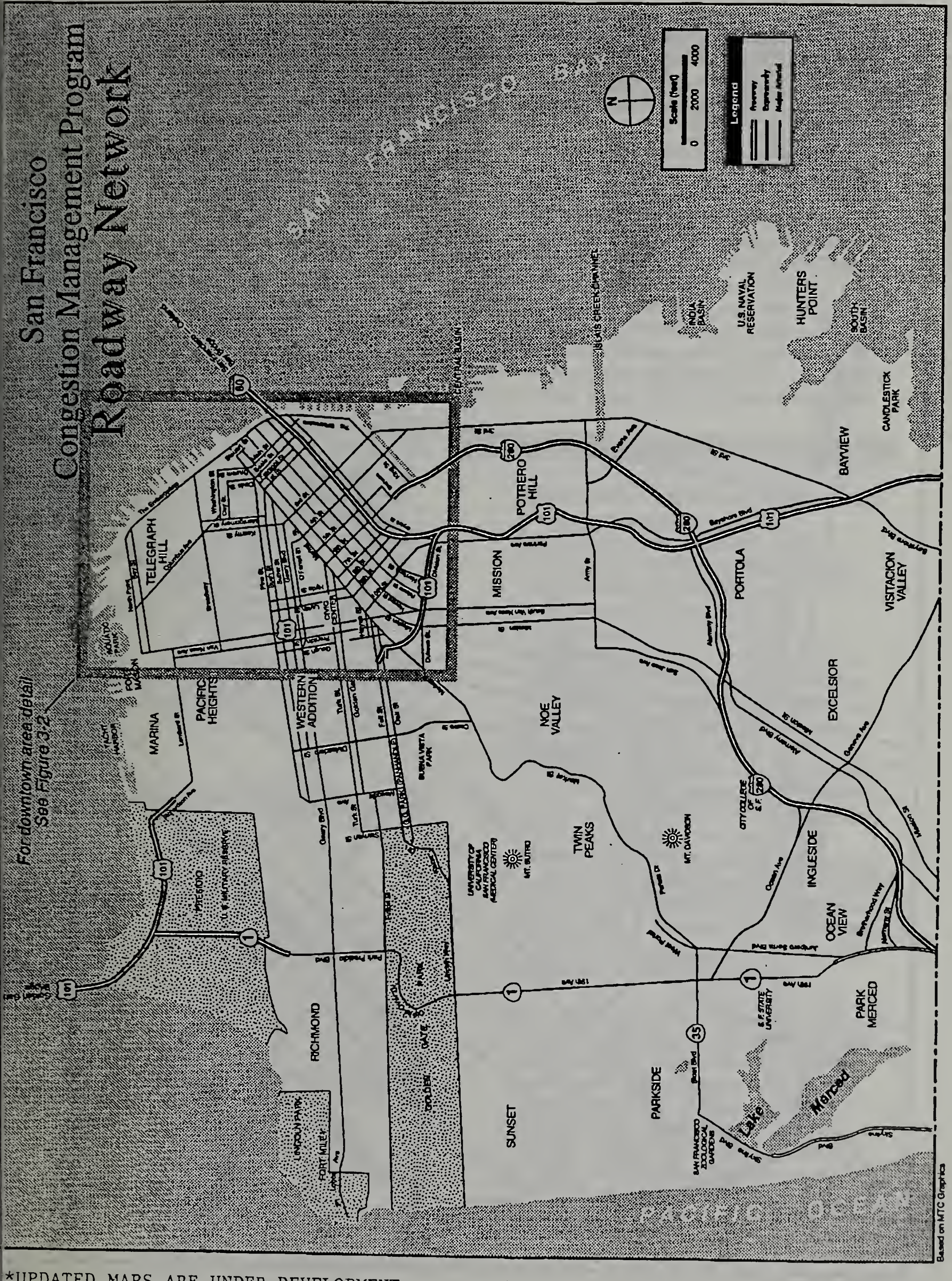
Consistent with State requirements, the San Francisco CMP roadway network includes all freeways and state highways, as well as principal arterials. The statutes do not provide a definition of "principal arterials" that must be included in the network. San Francisco has defined these as the Major Thoroughfares designated in the Transportation Element of the City's General Plan. Major Thoroughfares are defined as follows:

> *"cross-town thoroughfares whose primary function is to link districts within the city and to distribute traffic from and to the freeways; these are routes generally of city wide significance; of varying capacity depending on the travel demand for the specific direction and adjacent land uses."*

Several additional thoroughfares - Market Street, Mission Street, Sutter Street, outer Geary Boulevard, and portions of Turk Street - have also been included in the CMP roadway network. These streets experience serious conflicts between auto traffic and high volumes of transit service, and may be susceptible to congestion management techniques such as signal pre-emption at key intersections, to reduce delays to transit vehicles.

b. Current Network

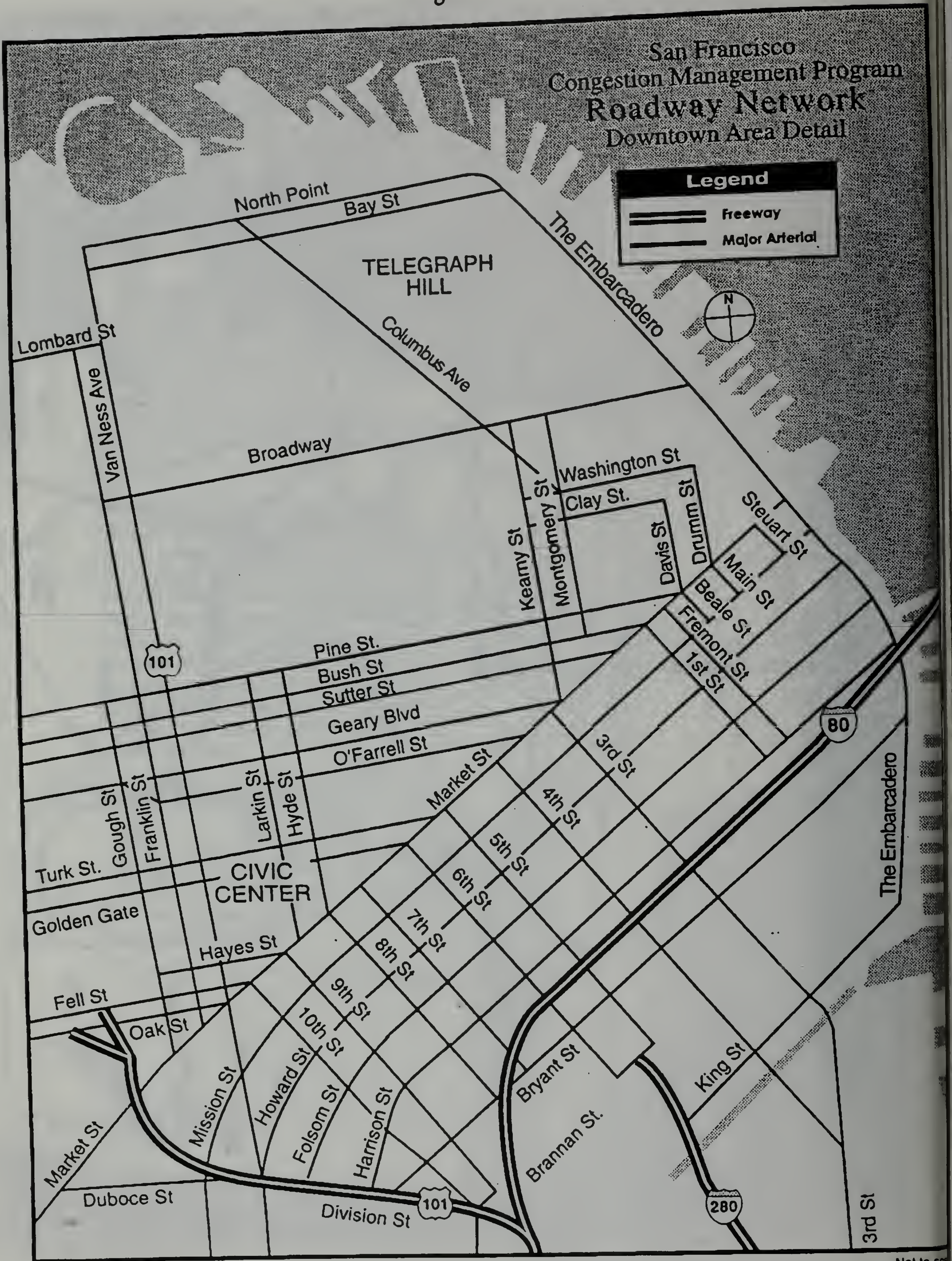
Figure 3-1 depicts the complete CMP roadway network for San Francisco, which comprises 134 miles of roadway facilities. Figure 3-2 shows a detail for the downtown area.



San Francisco Congestion Management Program Roadway Network

*UPDATED MAPS ARE UNDER DEVELOPMENT.

Figure 3-2



Based on MTC Graphics

**UPDATED MAPS ARE UNDER DEVELOPMENT.

Freeways and State Highways

San Francisco's CMP roadway network includes 17 miles of freeways in the city, on Interstate 80, Interstate 280, and US Route 101. A total of 15 miles of State routes designated along city streets are also part of the CMP roadway network, as follows:

- US Route 101 - Richardson Avenue, Lombard Street west of Van Ness Avenue, and Van Ness between Lombard Street and Golden Gate Avenue;
- Route 1 - Park Presidio Boulevard, 19th Avenue , and Junipero Serra Boulevard south of 19th Avenue;
- Route 35 - Sloat Boulevard between 19th Avenue and Skyline Boulevard as well as Skyline Boulevard.

City Arterials

The CMP network includes 102 miles of city arterials. Appendix III lists all city arterials included in the CMP network in addition to those designated as state routes.

c. Proposed Changes - Rationale

State law prohibits the removal of roadway facilities from the initially designated CMP network. This is intended to ensure proper monitoring of system performance. Facilities that are physically removed from the transportation system, such as the Embarcadero Freeway, are obviously not affected by this prohibition, but will be evaluated for future inclusion and monitoring as part of the CMP network once replaced or rehabilitated. New facilities may be added to the CMP network without restrictions, subject to the established criteria for inclusion. In order to improve the reliability of performance (LOS) monitoring, the 1993 CMP introduced changes to the segmentation of roadway facilities. These changes and their rationale are described in Chapter 4.

The analysis of the CMP roadway network conducted as part of the 1995 CMP update recommended addition of Guerrero Street to the CMP network, from César Chávez to Market Street. However, further investigation appears necessary to determine operating conditions, effects of post-earthquake traffic, and relationship to Master Plan policies. Consequently, inclusion of this facility in the network will be considered as part of the 1995 CMP work program.

d. Relationship to the MTS

San Francisco's CMP roadway network is broadly consistent with the Metropolitan Transportation System (MTS), as defined by the Metropolitan Transportation Commission's (MTC) latest revisions to the Regional Transportation Plan. The MTS is a regional network of roadways, transit corridors and transfer points, identified by the MTC on the basis of specific criteria. The State highways and major thoroughfares designated in San Francisco's CMP roadway network are all included in the regional MTS network. There are a few instances in which the local CMP roadway network is not identical to the regional MTS network due to differences in the criteria used to define each network. San Francisco's CMP and MTS networks are coordinated with the networks of adjacent counties, to ensure regional connectivity.

As a result of a 1993 agreement, the MTC has delegated responsibility to the Authority for implementation of certain mandates contained in the federal Interstate Surface Transportation and Efficiency Act of 1991, including the analysis of potential impacts on the MTS of proposed local land use decisions (see Chapter 7).

4. Work Program Items - Key Milestones

- Consider additional roadway facilities for the network - By July 1996 (for the next CMP update).

CHAPTER 4

ROADWAY LEVEL OF SERVICE (LOS) MONITORING

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Technical Approach**
- **Monitoring Results**
- **Future Monitoring Approach**
- **Caltrans' Role**
- **Work Program Items - Key Milestones**

he previous Chapter described the CMP adway network and the criteria for inclusion f certain roadway facilities. This Chapter ocuments the methodology used for ionitoring this system, and provides a omparison of monitoring results from 1991 nd 1993.

Legislative Requirements

alifornia Government Code requires the stablishment of operating standards for the MP-designated network of roadway cilities, and it leaves to the CMA the choice mong allowable methods for measurement of vel of service (LOS) as detailed in one of the llowing sources:

- Transportation Research Board Circular 212 (TRC 212),
- Transportation Research Board's Special Report 209: *Highway Capacity Manual* (*HCM*), latest version; or
- A uniform methodology adopted by the CMA that is consistent with the *Highway Capacity Manual.*

Section 65089(b)(1)(B) states that "In no case shall the LOS standards established be below the LOS E or the current level, whichever is farthest from LOS A. When the level of service on a segment or at an intersection fails to attain the established level of service standard, a deficiency plan shall be adopted pursuant so section 65089.4" In addition, Section 65089.3 establishes that "The [California] Department [of Transportation] is responsible for data collection and analysis on state highways, unless the agency designates that responsibility to another entity."

2. Legislative Intent and Application to San Francisco

LOS is a traffic engineering concept designed to describe the operating conditions on a roadway. LOS describes operating conditions on a scale of A to F, with A being the best (free flow), and F being the worst (bumper-to-bumper) conditions. Attributes that make up the A to F degrees of the LOS scale are a mixture of quantitative measures (such as speed and travel time), and qualitative observations, such as freedom to maneuver. The result is a system that is highly descriptive, but which also allows meaningful quantification and comparison of results for different facilities and situations.

LOS standards are the reference point or quantified goal against which it is possible to measure the performance of the CMP roadway network. If actual system performance falls below the standard, (i.e., congestion worsens) actions must be taken to restore or improve LOS. Annually the Congestion Management Agency is required to determine the City's conformance with the CMP, including attainment of LOS standards.

The intent of the legislation is to use LOS as the main indicator of congestion and as the uniform yardstick for measurement of improvement, as well as to gauge the congestion abatement potential of proposed transportation solutions. The choice of LOS for this purpose reflects the suburban roots of the congestion management legislation: congestion relief is to be measured by the ability of the transportation system to move automobiles, because in the suburbs the single-occupant automobile is still the prevalent mode of transportation. It also reflects the fact the LOS has been used and codified more extensively and systematically than any other transportation facility performance method. Therefore LOS is also the method that offers least potential for controversy or challenge when a CMA makes a finding of non-conformance.

Improvements on the LOS scale ensure better travel conditions for motorists, but the LOS scale does not take into account the *people* throughput potential of a roadway. Under optimum (LOS "A") operating conditions, a city arterial may be carrying the maximum number of automobiles at high speed, but if each vehicle carries only the driver the *people* throughput of the facility is suboptimal. San Francisco faces a double challenge on this issue: on the one hand the City must comply with the LOS requirements and prevent LOS conditions from deteriorating below the set standards; on the other hand, it must strive to identify a performance measurement method that reflects San Francisco's transportation realities more appropriately than LOS.

Over the next decade, the performance measurement method will play an increasingly significant role in San Francisco's congestion management efforts as the City undertakes or completes rehabilitation of a number of significant transportation projects, such as the Embarcadero Roadway, the Terminal Separation Structure, the Central Freeway, the Transbay Terminal, Doyle Drive, and the MUNI Metro Turnback. Mitigation of congestion impacts and analysis of deficiencies will require significant coordination between City departments and the Authority, to ensure continued conformance with CMP requirements.

The maintenance of LOS standards on CMP roadways in San Francisco will require a comprehensive and multi-modal approach which takes into account the congestion relief potential of transit and other non-automobile based solutions, as well as operational improvements to roadways. During 1995-6 and 1996-7 the Authority will continue the development of specific information and guidance about congestion management actions and their congestion relief potential in different situations. In particular, the Authority will investigate, through its Strategic Analysis Reports (SARs) or through corridor or areawide evaluations, the appropriate geographic reach and effectiveness of congestion management measures.

Technical Approach

Annual LOS monitoring on the entire CMP network is performed using Federal planning funds available through the Authority. At the time of annual conformance findings the Authority, acting as the CMA, assesses the City's conformance with LOS standards based on the results of monitoring. The CMA ensures that LOS measurement methods used by its contractors, Caltrans, or any other agencies involved in monitoring the CMP network are consistent with State law.

a. LOS Standard

The traffic LOS standard for San Francisco is consistent with CMP mandated criteria and was established at E in the initial (1991) CMP. The law exempts from monitoring all CMP network facilities which were already operating at LOS F at the time of baseline monitoring conducted in connection with the development of the first CMP in 1991.

b. Methodology

The methodology used for monitoring LOS on San Francisco's CMP network follows the specifications detailed in the Highway Capacity Manual. All 134 miles of freeways and arterials in the network are monitored using a floating car technique, which allows determination of LOS on the basis of average operating speed. For this purpose the network is divided into 89 segments. For a detailed description of monitoring techniques, refer to Appendix IV.

i. **Freeways**

US Route 101, Interstate 80, and Interstate 280 are the only roadway facilities with designated freeway status in San Francisco. Each of these freeways also serves as a primary gateway for interregional travel between San Francisco and adjacent counties. Consistent with the law, LOS monitoring for these facilities is based on average operating speed. In addition, an alternative measure of LOS using the ratio of observed traffic volumes to freeway capacity (or "V/C ratios") at selected county border screenlines is used as a test of reasonableness of LOS monitoring results. Volume data for Interstate 80 at the Bay Bridge toll plaza are available through the Metropolitan Transportation Commission for this purpose. Similarly, volume data for US Route 101 at the Golden Gate Bridge toll plaza are available from the Golden Gate Bridge, Highway, and Transportation District. For this facility V/C ratio is calculated for the morning peak period, inbound into San Francisco, because toll payment allows more accurate enumeration than outbound (toll free) travel.

ii. **Arterials**

Arterials designated in San Francisco's CMP network include the following three groups of streets:

√ segments of state routes which operate on City streets;
√ major thoroughfares identified in the City's Master Plan;
√ other major streets with significant conflicts between automobile traffic and high volumes of transit service.

These three groups of City streets form the backbone of San Francisco's arterial network. The operation of these arterials is controlled through an interconnected set of signalized intersections. The overall performance of each arterial is best evaluated through analysis of segments of each roadway. Evaluation is performed following the "Urban and Suburban Arterials" methodology of the 1985 Highway Capacity Manual (Chapter 11). The methodology is applied to determine level-of-service for each arterial segment using direct field measurements of average travel speed.

c. Network Segmentation Documentation of Method and Criteria

Development of the 1993 CMP included a comprehensive effort to document the criteria used in 1991 to establish the initial segmentation of the CMP roadway network in San Francisco, including freeway facilities. The following five criteria were identified as major determinants of segment limits for the city arterials in the CMP: predominant development patterns (including factors such as number of driveways, institutional users, etc.), changes in speed limits, major cross streets, significant changes in traffic volumes, and occurrence of freeway ramps. These criteria are dictated by accepted traffic engineering practice, and they reflect factors that are generally recognized as significant in explaining the operating behavior of a roadway. Appendix IV contains a listing of all CMP arterials in San Francisco, highlighting the specific criteria that apply to determine the geographic limits of each segment.

For freeway facilities the segmentation criteria are simpler. They include interchange on and off ramps, and points were two freeway facilities merge or bifurcate. Segment limits for freeways in the San Francisco CMP are also shown in Appendix IV.

Segmentation Changes
Table 4-C lists all CMP arterials where segmentation changes were introduced as part of the 1993 CMP, including a technical justification. Changes were introduced in the segmentation of 18 arterials in the network. The new arterial segments follow more closely the five segmentation criteria described above, and they provide a better framework for monitoring of LOS, improving comparability of results among similar facilities. By better reflecting local conditions these new segments increase the reliability and explanatory power of LOS measurements on the network. This is essential to provide a solid basis for decision-making leading to development and implementation of congestion management actions. No segmentation changes were proposed as a result of the 1995 LOS monitoring cycle, but changes may be considered during fiscal years 1995-6 and 1996-7, as necessary.

4. Monitoring Results

In order to determine initial ("baseline") LOS conditions, monitoring of the CMP network was performed by the Department of Parking and Traffic during the summer of 1991. This initial monitoring also allowed identification of network segments at LOS F which are legislatively exempted from conformance with the established LOS "E" standard but will continue to be periodically monitored and targeted for congestion management measures as appropriate. CMP arterial and freeway segments identified at LOS F in the 1991 San Francisco CMP are shown in Appendix IV.

Tables I through IV in Appendix IV show LOS monitoring results for all segments of arterials and freeways in the CMP network. The information includes segment length, direction of travel, time of day (AM and PM peak), average operating speed measured, and LOS results for both 1991, 1993, and 1995.

LOS monitoring for the current conformance determination cycle was performed during April and May 1995. Figures 4-1 and 4-2 show CMP network segments operating at LOS D or worse during the 1995 monitoring for the PM peak period.

Table 4-D lists the segments which were found to be at LOS F during the 1995 monitoring. Only two additional arterial segments appear to be deficiencies as a result of the 1995 monitoring. They are Brannan Street westbound from 5th to 6th Street during the a.m. peak and Stanyan Street southbound from Turk Street to Fulton Street during the p.m. peak. In order to corroborate these results, and to determine the contribution of regional trips to this LOS F measurement, these two segments will be further monitored twice, in October/November 1995 and March/April 1996. If the segments are found to be deficient during the April 1996 monitoring (after deducting the trips exempted by law), the City will be required to prepare and implement a deficiency plan.

In general, the 1995 monitoring shows considerable variability in overall traffic conditions over the entire arterial network compared to previous monitoring results. Continual improvement and standardization of the speed measurement techniques may account for some of the variability in LOS measurements. The freeways show no significant change.

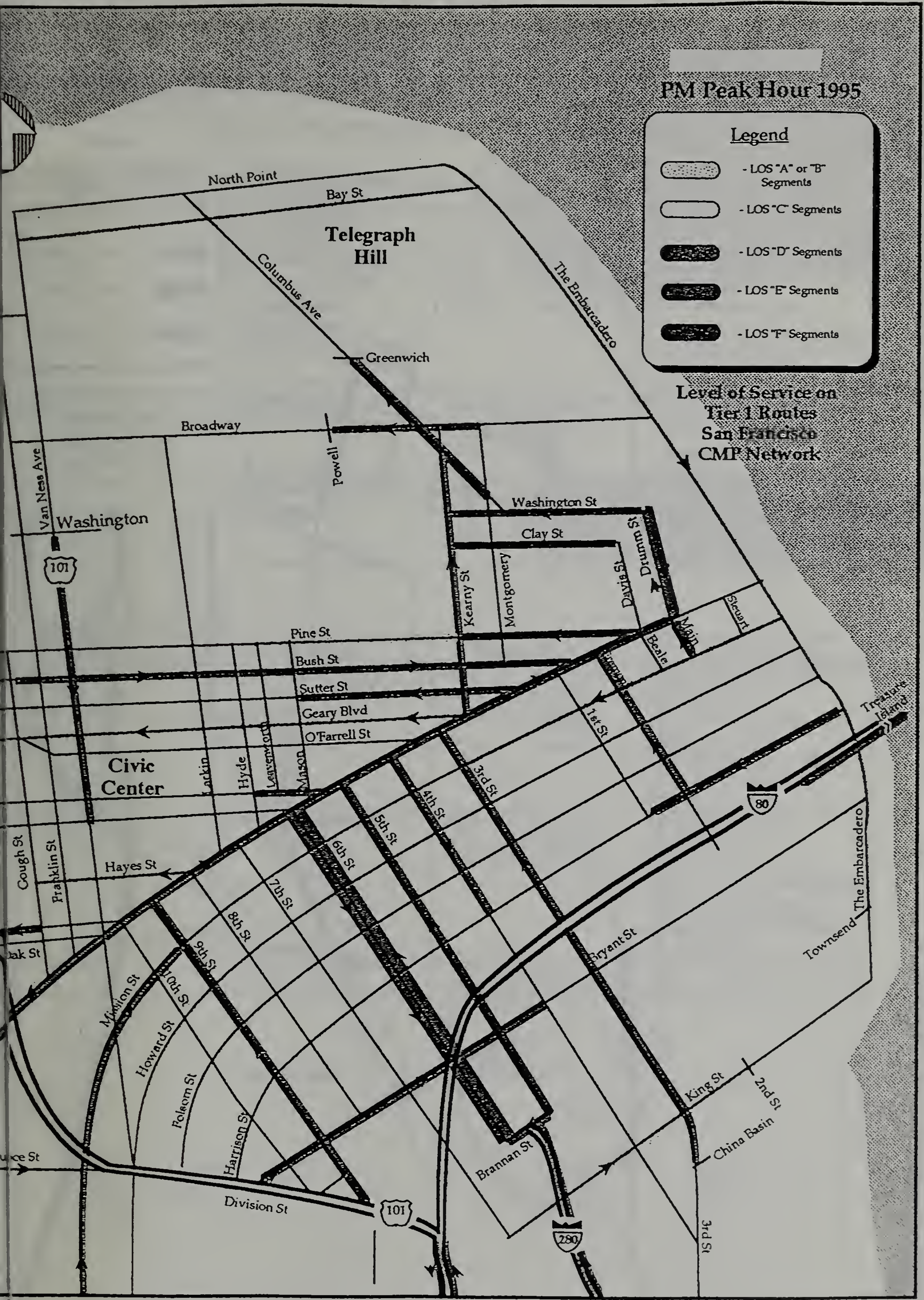
Table 4-C
Rationale for Changes to Arterial Segmentation Since 1991

Third Street	Eliminated Fairfax Street as a break point. Evans Avenue is the new break point because of the change in speed limit and because Evans is a major cross street.
Alemany Boulevard	Lyell Street is a necessary break point because of a speed limit change.
Army Street (César Chávez)	Because of the size of the U.S. 101 interchange at Army Street circle, a break point was established on each side of it. One is at Kansas Street and a second is at Bryant Street.
Bayshore Boulevard	Industrial is a necessary break point because of nearby off and on-ramps.
Bush Street	Gough is the best divider to break Bush into two segments because land use changes occur at Gough and because it is a major cross street.
Duboce Avenue	Folsom Street was eliminated as a break point and replaced with Mission Street, because of the presence of on and off ramps to 101.
Evans Avenue and Fremont Street	The 1991 intermediate segment limits could not be justified and were eliminated (no apparent change in traffic flow conditions)
Fulton Street	Arguello was identified as an intermediate segment limit because it is a major cross street and because of a speed limit change.
Harrison Street	Eliminated 2nd. Street and substituted First Street is the first break point because of the I-80 on-ramp.
Junipero Serra Blvd	The first segment boundary is 19th Avenue instead of Holloway, as justified by the change in speed limit and also because 19th Avenue is a major cross street.

Table 4 - C (Contd.)

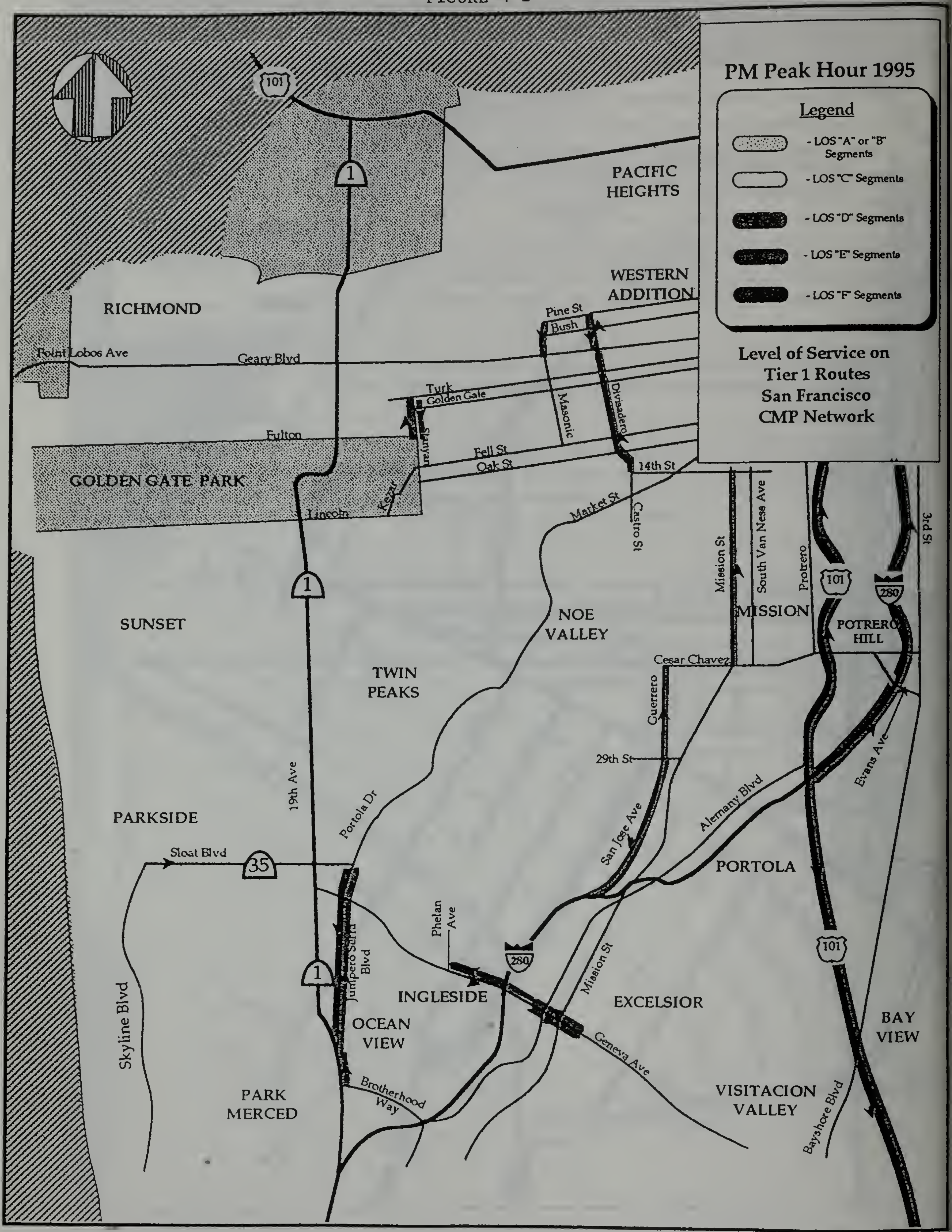
Lombard Street	Eliminated intermediate segment boundaries because land uses and traffic conditions are uniform along this street.
Market Street	Established a new segment boundary at Clipper because of a change in grade on each side of Clipper. Eliminated unjustified breaks at Danvers, Sanchez and Gough
Mission Street	Eliminated intermediate boundaries between 14th and Army and between Army and Ocean to better reflect land use.
O'Farrell Street	Eliminated intermediate segment boundaries at VanNess, Leavenworth and Taylor, which created segments too short for accurate measurement. Mason is the new break point because of land use changes.
Van Ness Avenue	Added Golden Gate Avenue as an intermediate segment boundary because of land use changes (start of the Civic Center area).

FIGURE 4-1



*Final map for this figure is under development.

FIGURE 4-2



*Final map for this figure is under development.

Table 4-D
1995 LOS Monitoring Results - LOS F Segments

A.M. Peak Period

CMP Route	Limits	Speed Results	Comments
Brannan St WB	From: 5th Street To: 6th Street	1993: 8.9 mph (E) 1995: 6.1 mph (F)	This segment exceed the standards.
Drumm St SB	From: Washington To: Market Street	1991: 9.5 mph (D) 1993: 9.1 mph (D) 1995: 5.3 mph (F)	The results were affected by construction and detours on the Embarcadero. They do not constitute a deficiency.
I-280	From: City Limit To: US 101	1991:22.9 mph (F) 1993: 43.0 mph (E) 1995: 27.3 mph (F)	Already at LOS F in 1991. Per state law the results do not constitute a deficiency.
I-80	From: Treas. Island To: Fremont	1991:17.5 mph (F) 1993: 32.2 mph (E) 1995: 26.5 mph (F)	Already at LOS F in 1991. Per state law the results do not constitute a deficiency.

P.M. Peak Period

CMP Route	Limits	Speed Results	Comments
Drumm St WB	From: Washington To: Market Street	1991: 9.5 mph (D) 1993: 9.1 mph (D) 1995: 5.3 mph (F)	The results were affected by construction and detours on the Embarcadero. They do not constitute a deficiency.
Market St WB	From: Van Ness Ave. To: Drumm St	1991: 9.6 mph (D) 1993: 12.9 mph (D) 1995: 6.3 mph (F)	The results were affected by construction and detours in the vicinity of Van Ness Avenue. They do not constitute a deficiency.
Stanyan St SB	From: Turk Street To: Fulton Street	1993: 7.6 mph (D) 1995: 2.3 mph (F)	This segment exceeds the standard.

Future Monitoring Approach

In addition to average speed measurements, during fiscal years 1995-6 and 1996-7, the Authority will be exploring with the Department of Parking and Traffic the possibility of systematizing existing measurements of arterial traffic volumes by tube counts (mechanical counters) so that they can provide additional data at regular intervals. Other possibilities, including installation of traffic counting loops detectors at permanent count stations, and the need for new cordon counts of downtown (the last one was in 1983) will also be considered. Arterial volume counts may be used to monitor the progress of congestion management actions in between biennial LOS measurements.

In order to determine frequency of LOS monitoring, each segment of San Francisco's CMP network is assigned to one of two tiers. Roadway segments operating at levels of service D or E (poor conditions) at the time of the most recent monitoring are classified as Tier 1, and subject to average operating speed monitoring at least once every year. Segments operating at LOS A through C are classified as Tier 2, and monitored over a two-year cycle. The Authority may require more frequent average operating speed monitoring of Tier 1 or 2 segments, if tube counts or other evidence gathered between annual conformance determinations suggests significant or more rapid increase in congestion than initially anticipated.

Although the focus of the Congestion Management Program is on system-level analysis and link-level measurement of LOS, in order to more closely track the evolution of congestion problems on the CMP network, the Authority may require an examination of operating conditions at certain intersections. Intersection analysis techniques will follow the methodology described in Chapter 9 of the 1985 Highway Capacity Manual. In addition, operational analyses of intersections for assessment of impacts in connection with land development proposals will follow the analytical methods detailed in the City's environmental review guidelines (see Chapter 7: *Land Use Analysis Program*).

Caltrans' Role

Pursuant to the changes introduced in section 65089.3, the Authority has already initiated the drafting of a memorandum of understanding involving all Bay Area CMAs and Caltrans District 4, to further define and coordinate the Department's LOS monitoring activities on the regional freeway system.

7. Work Program Items - Key Milestones

- Finalize MOU with Caltrans on LOS monitoring on the freeway system, by February 1996.
- Monitor newly identified LOS F segments on Stanyan an Brannan Streets in October/November 1995 and March/April 1996.
- Make final determination of deficiency for new LOS F segments if they remain at LOS F after applying allowable exclusions to the April 1996 measurement, by July 1996.
- Develop approach for incorporation of traffic count information (arterials and freeways) into the CMP monitoring process, by December 1996.
- Propose CMP network segmentation changes if necessary, by October 1996.

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CHAPTER 5

MULTIMODAL PERFORMANCE MEASURES

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Multimodal Performance and Mobility**
- **Uses of Multimodal Performance Measures**
- **Methodology for Performance Evaluation**
- **Work Program Items -Key Milestones**

1. Legislative Requirements

Section 65089(b)(2) replaces the transit service standards requirements in the 1991 and 1993 CMPs. It is the result of changes to CMP law introduced by AB 1963 in 1994. The statutes state that the CMP shall include "[a] performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance measures shall incorporate highway and roadway system performance, and measures established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators. These performance measures shall support mobility, air quality, land use, and economic objective, and shall be used in the development of the capital improvement program..., deficiency plan..., and the land use analysis program...."

2. Legislative Intent and Application to San Francisco

The intent of the new performance element is to broaden the very narrow definition of performance used in the original legislation, which limited measurement to LOS on roadways. It is an acknowledgment of the need for diversified solutions to complex transportation problems in urban areas, and the impossibility of tackling them with just one mode. Furthermore, the performance element recognizes the connection between transportation investment and system performance and that this performance should be measured.

San Francisco's environment is suited to the use of alternative performance measures and to the application of multimodal performance criteria. High transit share and large transit investments mean that the City will benefit from a multimodal approach to system performance.

Although the legislative intent is clearly to encourage the use of alternatives to traveling by single-occupant automobile, lack of additional funding for transit operations dictates a cautious approach to determining the degree to which congestion mitigation will be dependent on expansion of traditional fixed-route transit service, particularly in light of the City's current fiscal crisis, which may trigger MUNI service cuts. Other alternatives for improving mobility and addressing congestion are addressed in the Chapter 6: Trip Reduction Element.

3. Multimodal Performance and Mobility

The performance of the multimodal transportation system has a critical impact on mobility in San Francisco. Mobility is a concept which is not easily defined in a few words, but it refers to people's ability to travel or ease of travel from point A to point B. Mobility has several key aspects. In analyzing mobility involving, for example, travel from A to B, we would consider:

a. the availability, convenience, and accessibility of transportation between A and B.
b. the availability of *options* (more than one mode of transportation, or more than one alternative within a mode, such as different bus routes) to travel between A and B
c. the *affordability* of transportation between A and B
d. the *reliability and safety* of transportation between A and B

These are attributes of the transportation system, but they are not constant. They are likely to vary if we consider a different origin-destination pair, instead of A and B; and they may even vary for different types of users even considering the same A/B pair: for example the same bus route may be convenient to one person and inaccessible to their next door neighbor who cannot walk one block uphill to the bus stop. These system attributes also vary with trip purposes and time of day. A 20-minute bus headway may be OK for a mid-day shopping trip, but may be inadequate for a morning commute trip. Similarly, a 20-minute wait for a bus may not be an option at night in an unsafe neighborhood.

Thus, the same A/B pair may have several different accessibility ratings depending on age, physical disability, or time of day. It is easy to see how traditional service quality indicators, such as geographic coverage or bus route frequency only provide part of the system performance picture.

These distinctions can in many cases explain the choice between transit and other modes, particularly for trips within San Francisco, and are therefore very important to consider in attempting to measure system performance. This is so because in measuring performance we are measuring the ability of the system to satisfy the transportation needs of all San Franciscans.

4. Uses of Multimodal Performance Measures

Multimodal performance measures will be used for the following purposes:

a. **CMP Conformance Determinations:** Link (roadway) Level of Service (LOS) will continue to be used for conformance determinations for the next year, while alternative measures are further developed and tested.

b. **CIP Amendments:** The Authority will evaluate the potential impacts of proposed CIP changes on the performance of the multimodal network. This information will be used as one of the factors in deciding Authority concurrence with such proposals. See Chapter 8 for further details.

c. **Deficiency Plans:** Only link LOS measurements will be used for deficiency determinations. However, other multimodal measures will be used in the assessment of future deficiencies, though predictive deficiency identification does not have conformance implications under current CMP law.

d. **Land Use Impacts Analysis:** It is expected that multimodal performance measures will be used for the analysis of impacts of local land use decisions on the CMP network, but the specific approach will be finalized pending further discussion with the Planning Department. Because the land use impacts analysis process is only advisory, the Authority expects to apply a number of performance measures to the analysis, to test their adequacy over time.

5. Methodology for Performance Evaluation

Consistent with state law, the 1995 San Francisco CMP distinguishes between two tiers of performance measures. Tier 1 includes roadway LOS plus three transit service performance measures: routing, frequency, and interoperator service coordination. These are the most traditional measures, with a more substantially documented record of reliability in terms of our ability to measure and interpret them accurately. They will be used in connection with CMP conformance determinations.

Tier 2 includes new multimodal performance measures which will require some testing before they are applied to the CMP conformance process. These are included in the present document so that the Authority may initiate consultation with City departments and other transportation agencies, and begin testing. Standards will be developed for these performance measures according to the results of testing and consultation over time.

Starting in June 1996, Authority staff will prepare an annual system performance report and submit it for consideration by the Authority Board. The 1996 report will include information about Tier 1 measures and a progress report on Tier 2 activities. Transit performance information will also be included, as described in section 5.5.3.

5.1. Criteria For Selection of Tier 2 Performance Measures

In order to minimize collection efforts, performance measures should be reliable, intuitive, and the data required should be readily available from City departments or from other Authority activities. In addition, these measures must be relevant to the evaluation of mobility issues as described in Section 3 above, and applicable to the specific CMP uses described in Section 4 above,

The Authority's Transportation Analysis Database will be the main tool for analysis of system performance and it will be the main repository for performance-related data. A detailed description of the TAD will be included in the update of Chapter 10, expected to occur by April 1996.

Tier 1 and 2 performance measures are described in detail in the following sections.

5.5.2. Tier 1 Performance Measures

a. **Roadway Level of Service (LOS):** This is the most traditional and best documented performance measure. It is also not the most adequate to assess performance in a system which includes a major transit component, as well as substantial amounts of pedestrian and bicycle travel. It is described in detail in Chapter 4: LOS Monitoring.

b. **Transit Coverage/Routing:** This refers to the pattern of the transit route network (e.g., radial, grid, etc.) and the service area covered (e.g., percent of total population served within one-quarter mile; or percent of total urbanized area served).

c. **Transit Frequency:** This is the number of transit vehicles (buses, trains or ferries) per hour (e.g., 4 buses per hour). The inverse of the frequency is called "headway", which is the time between transit vehicles (e.g., 15 minutes between buses).

Table 5-A shows frequency and coverage standards for all transit operators that provide service in San Francisco. For ease of understanding, in all cases frequency standards are expressed using the concept of "headway", which is the time between two consecutive transit vehicles in a given route. For example: instead of "4 buses per hour" (i.e., frequency of service), the tables show "15-minute headways".

A number of transit operators provide connections to and from points outside the city. Because of the predominantly suburban, low-density environment in which they function, which limits the amount and kinds of service they can provide, these operators have established significantly different standards from those that MUNI is expected to achieve in San Francisco. These differences are reflected in Table

5-A. The transit standards are essentially established policy and in most cases are taken directly from each operator's current Short Range Transit Plan.

d. **Interoperator Coordination:** This addresses the linkages between transit services provided by different operators (e.g., timed transfers at transit centers, joint fare cards, etc.), to facilitate the use of transit.

Senate Bill 602 requires that MTC, in coordination with the Bay Area's Regional Transit Coordinating Committee (RTCC), develop rules and regulations for fare and schedule coordination in MTC's nine-county Bay region. The SB 602 process, already under way for four years, is considered sufficient to meet the intent of CMP law regarding transit service coordination in the region. Compliance with the SB 602 process by MUNI and all other operators serving San Francisco will therefore constitute sufficient grounds for a finding of conformance with CMP transit coordination requirements.

5.5.3. Tier 2 Performance Measures

Three new multimodal performance measures will be considered and tested over the next 2 fiscal years. They include:

a. **Travel Time:** This measure addresses travel times between a set of origins and destinations (up to 20 pairs) in San Francisco. They will be measured for different modes, including private automobile and transit.

b. **Travel Options:** This measure will address actual alternatives for trip making. It will focus on the investigation of alternatives for travel by transit (alternative routes, or combinations of routes), and the factors affecting them (such as street safety, topography, etc.)

c. **Travel Time Predictability:** This measure will address the ability of the transportation system to ensure that trip durations (by different modes) in San Francisco remain fairly constant over time.

These are significant variables in explaining people's choices of a mode of transportation within the city. They will be measured using a combination of field observations, transit timetables, street topography data, and statistics about neighborhood safety, demographic characteristics and transit route safety. Except for the field measurements, the rest of the information is collected routinely by different City departments and is readily available. The Transportation Analysis Database will be used to analyze the data.

By February 1996, the Authority will, after consultation with City departments, confirm or modify the list of Tier 2 variables. Testing will start by April 1996, after testing design is finalized. Final Tier 2 measure for application to the performance evaluation process, will selected by December 1996.

5.5.4. Other Performance Measures

In addition to the measures described in sections 5.5.1 and 2 , above, there are a number of other measures that can provide further perspective on the performance of the transit system. Table 5-B includes seven such measures which will be tracked and included in the annual performance report to the Authority Board. These measures can be tracked using data currently collected by MUNI and other transit operators.

Table 5-A

Transit Service
Frequency and Coverage Standards
MUNI

Frequency Standard

SERVICE TYPE	TIME PERIOD				
	Peak	**Base**	**Evening**	**Owl**	**Weekend/Holidays**[1]
Radial	10	15	20	30[2]	15
Express	10	--	--	--	n/a
Crosstown/Secondary	15	15	20	30[2]	20
Feeder	20	30[2]	30[2]	--	30[2]

[1] Weekend/Holiday information is provided for base service only.

[2] For lines that provide this service.

Coverage Standard

All San Francisco residential locations should be within a walking distance to a route of a quarter mile or less for MUNI's 19-hour basic service day.

AC TRANSIT

Frequency Standard

SERVICE TYPE	TIME PERIOD				
	Peak	**Mid-day**	**Night**	**Owl**	**Weekend/Holidays**
Transbay Express	30	--	--	--	--
Transbay Basic	15	30	30	--	--

Coverage Standard

AC Transit provides two levels of service to the Transbay Terminal in San Francisco. Transbay Express provides medium to high frequency peak-hour service between San Francisco and selected areas of the District where there is demand for transit services which BART cannot meet. Transbay Basic provides direct service between San Francisco and major East Bay areas that are not well served by BART; the service operates all day at a medium to high frequency on a local and/or limited stop basis.

Table 5-A (cont.)

BART

Frequency Standard

TIME PERIOD	LINE Concord Daly City	Fremont Daly City	Richmond Daly City
Weekday Peak	7.5	12	15
Weekday Mid-day	15	15	15
Weekday Night	20	--	--
Saturday Day	20	20	20
Saturday Night	20	--	--
Sunday/Holiday all day	20	--	--

Coverage Standard

BART rail service is provided between the hours of 5:00 a.m. and approximately 1:00 a.m. Monday through Friday, 6 a.m. to approximately 1:00 a.m. on Saturdays, and 8 a.m. to approximately 1:00 a.m. on Sundays and major holidays. Closings for individual stations are timed with the schedule for the last train beginning at approximately midnight.

BART has eight stations in San Francisco: Four spaced a half mile apart on Market Street and four at variable distances in the southwestern part of the City.

Table 5-A (cont.)

CALTRAIN

Frequency Standard
30-minute headways during the peak
1 hour headways off-peak

Coverage Standard
The CalTrain system operates on a 46.9 mile route between San Francisco and San Jose. There are 26 stations in the 16 cities that CalTrain serves, including four in San Francisco. Stations are spaced between 1.0 and 4.1 miles apart.

GOLDEN GATE TRANSIT

Frequency Standard

	TIME PERIOD	
	Peak	Base
SERVICE TYPE		
Commute Bus	15	--
Basic Service Bus	30	60
Larkspur Ferry	30	2 hrs.
Sausalito Ferry	75	75

Coverage Standard

Commute bus routes operate weekdays, in the peak travel direction, between residential areas in Marin and Sonoma Counties and the San Francisco Finance District and Civic Center.

Basic service routes operate all day, seven days a week, between the Transbay Terminal and Civic Center in San Francisco and various suburban centers within Marin and Sonoma Counties.

The Sausalito Ferry operates with one boat and can only provide service as quickly as it can travel back and forth between Sausalito and San Francisco, usually an hour and a half.

Table 5-A (cont.)

SAMTRANS

Frequency Standard

SERVICE TYPE	TIME PERIOD Peak	 Base
Commute Bus	30	--
Basic Service Bus	--	60

Coverage Standard

1. Serve each city within San Mateo County with at least one bus route.

2. Maintain bus service within the following regional corridors:
   - o Highway 82 (El Camino Real)
   - o Highway 92 (San Mateo Bridge)
   - o Highway 101
   - o Highway 1 north of Half Moon Bay

3. Maintain bus feeder service to CalTrain stations located within San Mateo County at current levels (FY 1990/91).

4. Maintain bus feeder service to the Daly City BART station at current levels (FY 1990/91).

TABLE 5-B
MEASURES OF TRANSIT SERVICE PERFORMANCE

Performance Characteristic Addressed	Performance Measure Proposed
1. Efficiency	Cost per revenue vehicle hour
2. Efficiency	Cost per passenger
3. Efficiency	Cost per passenger mile
4. Efficiency	Rev. Veh. Hours per Employee
5. Effectiveness	Passengers per Rev. Vehicle Hour
6. Effectiveness	Passengers per Rev. Vehicle Mile
7. Service Reliability	Percent of scheduled runs missed
8. Service Reliability	Percent of scheduled runs on time

6. Work Program Items - Key Milestones

- Identify other Tier 2 performance measures through consultation with City departments - By February 1996
- Finalize design and begin testing of Tier 2 multimodal performance measures - By April 1996
- Present annual performance report to the Authority Board - By June 1996.
- Select multimodal measures - By December 1996

CHAPTER 6

TRIP REDUCTION ELEMENT

Key Topics:

- Legislative Requirements
- Legislative Intent and Application to San Francisco
- City Policy Framework
- Housing and Employment Balance
- Relationship of Travel Demand Management Activities to Air Quality Improvement Efforts
- Work Program - Key Milestones

1. Legislative Requirements

California Government Code Section 65089 (b)(3) requires development of a trip reduction and travel demand element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; other strategies, including flexible work hours and parking management programs; and parking cash-out programs. Each local jurisdiction was expected to adopt a Trip Reduction and Travel Demand Ordinance which incorporates these policies no later than November 1992.

Section 65088.1 of the Government Code and section 43845 of the Health and Safety Code require CMAs to consider and define a parking cash-out program as: an employer funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. Parking subsidy means the difference between the out-of-pocket amount paid by an employer on a regular basis in order to secure the availability of an employee parking space not owned by the employer and the price, if any, charged to an employee for use of that space. Section 43845 of the Health and Safety Code further specifies that the parking cash-out programs apply to employers of 50 or more persons in air basins designated as non-attainment areas under the State's Clean Air Plan.

In addition, Regulation 13, Rule 1, adopted on December 16, 1993, by the Bay Area Air Quality Management District (BAAQMD) in response to the mandates in the California Clean Air Act (CCAA), established a requirement for the development of trip reduction programs for all large public and private employers, defined as those with 100 or more employees at a single work site. In September 1995, however, the Legislature passed SB 437 (Lewis) which prohibits local jurisdictions, air districts or CMAs from imposing employer-based trip reduction mandates unless explicitly called for in federal law. The implications of this legislative change are significant and may lead to amendments to the CMP's trip reduction element over the course of the next fiscal year.

2. Legislative Intent and Application to San Francisco

The Trip Reduction and Travel Demand Element is a key feature of the CMP legislation. No other component of the CMP, except the Capital Improvements Program, is as clearly action-oriented as the trip reduction element. While the land use analysis program or level-of-service monitoring fulfill primarily a diagnostic function, identifying potential or actual congestion problems so that solutions can be developed, the trip reduction element mandates the establishment of local policy (i.e., trip reduction ordinances) coordinated at the subregional (county) level, explicitly aimed at curbing congestion by promoting major changes in trip-making behavior affecting both the nature of travel (as in staggered work hours), as well as the choice of travel mode (as in transit and shared rides instead of solo driving).

The requirement for local jurisdictions to consider parking cash-out programs as part of their trip reduction efforts, a 1992 addition to the original CMP legislation, aims at institutionalizing the notion of balance between the level of subsidy for different modes of transportation. Free parking at the work site, a traditional attribute of most employment opportunities (except in the urban core), is to be reconsidered. Transportation cost is redefined as a kind of employer-paid benefit, and employees can choose to use their transportation allowance to, for instance, pay for parking at the work site, pay for transit fare, or to buy into a vanpool. Charging the users the true cost of parking, it is argued, makes other options economically thinkable, and possibly even more attractive than driving alone. Issues of equity, feasibility and timing of implementation remain to be addressed, especially in suburban locations where transit service is usually not in place or must first be vastly improved before it can become a viable commute option. The City's parking policies, including a 25% tax on all off-street parking, are geared to discourage access into downtown by single occupant vehicle.

3. City Policy Framework

While San Francisco does not have an official citywide Trip Reduction Ordinance, over the last two decades the City has adopted a variety of policies designed to discourage travel by single-occupant automobile and promote other transportation alternatives. As a result the City was able to accommodate unprecedented growth in travel demand without significantly increasing investment in highway and street capacity expansion. In 1973, the City Planning Commission and the Board of Supervisors adopted a policy giving priority to transit vehicles on certain "transit streets". Over the next twenty years this action evolved into a set of strategies and policies known collectively as the City's "Transit First Policy". Transit First is San Francisco's pioneering and comprehensive response to the need for trip reduction and travel demand management. The City's Transit First Policy is documented in three different sources: the Transportation Element of the City's Master Plan; the Planning Code; and other City ordinances.

The following sections describe in detail the Master Plan's objectives and policies which focus on the Transit First policy. City Planning Code and other City ordinances intended to implement this policy are also discussed. Following that, a section of this chapter discusses policies intended to reduce travel demand by addressing the balance between housing supply and employment growth. The final section examines the relationship of San Francisco's trip reduction policies to regional recommendations for Transportation Control Measures designed to achieve air quality objectives.

A. Objectives and Policies in the General Plan

The following objectives and policies of the Transportation Element of the Master Plan focus on the City's policy toward a **transit oriented solution** to growth in travel demand, as well as the City's comprehensive transportation planning approach, which discourages the use of the single-occupant automobile.

Objective 1 - Policy 1: **promotes the use of multimodal performance measures** to assess the performance of the transportation system, and places the emphasis on person throughput over vehicle throughput.

Objective 2 : **gives priority to public transit** as the means of meeting transportation needs, and calls for the coordination and linkage of regional and local transportation systems.

Objective 3: calls for the **development of transportation demand management programs** to help reduce the number of single occupant vehicle trips and thereby contribute to reduced congestion and improved air quality.

Objective 4: promotes **the development of marketing strategies** (e.g. advertising, providing transit information) to encourage use of transit and other alternatives to the single occupant automobile for non-work trips such as shopping and recreational trips.

Objective 5: calls for **development and implementation of transportation systems management strategies** to improve the efficiency of existing transportation facilities.

Objective 6: : encourages **development of programs to manage parking at employment centers citywide**, and provide incentives to use transit or other alternatives.

Objective 7: **Focuses on discouraging provision of new long-term parking in the downtown area** and on efficient use of existing parking.

B. Existing City Ordinances

This section describes the Planning Code and other City ordinances dealing with implementation measures that support the Transit First policy, and other strategies developed by the City to discourage the use of the single-occupant automobile.

B.1. The Planning Code

a. Parking

Unlike most central cities, San Francisco has never required the provision of a minimum number of parking spaces as a condition for approval of downtown commercial development. This approach complements the City's Transit First policy. Other Policies adopted by the City also support this concept, which has been used to discourage and effectively control the growth of automobile travel in the downtown area. A comparison between 1965 and 1983 cordon counts of all vehicles entering San Francisco's greater downtown area indicates that vehicular traffic actually *decreased* slightly(about 3.7%). During that period approximately 30 million square feet of new office space were built in the downtown area, and just between 1970 and 1980 citywide employment increased by approximately 100,000 jobs, but the number of parking spaces in downtown remained about the same. Results from the 1987 update of parking counts are consistent with this pattern.

The following paragraphs reference the Planning Code Sections that address parking policy:

Section 204.5(c) establishes that parking is allowed (though not required) in the downtown area as an accessory use. The maximum garage area for accessory parking is limited to 7% of the gross floor area of the building. Any amount above the permitted 7% requires a Conditional Use permit authorization. Section 155(g) establishes a rate structure for parking open to the general public in the downtown area. The rate structure is intended to discourage long-term parking for all uses, with the exception of residential and hotel uses. The rate charged for four hours of parking cannot exceed four times the rate for the first hour. The rate for eight or more hours of parking cannot be less than 10 times the rate for the first hour. No discount parking is permitted for weekly, monthly or similar time-specific periods. The rate structure established under this section does not apply to stand-alone parking garages, i.e., parking that is not approved as a part of another development, although the City Planning Commission can use discretionary powers to apply the rate structure to stand-alone garages.

Section 156(h) permits new parking lots within the downtown area only as temporary uses, for a two-year period, and requires a Conditional Use permit authorization.

Section 161 eliminates parking requirements for commercial uses in dense districts which are well served by transit, including downtown, Chinatown, and Jackson Square, and reduce parking requirements in other districts based on similar criteria.

Section 223(m-p) allows parking garages as principal land uses in districts zoned C-3 (downtown commercial/office), but only by Conditional Use permit.

b. Transportation Management Programs and Transportation Brokerage Services

The purpose of these programs is to ensure that adequate measures are taken to minimize the transportation impacts caused by employment growth at major job centers. The program is carried out by facilitating the use of transit, promoting ridesharing, and by otherwise encouraging reductions in commute travel by single-occupant automobile.

Section 163 of the Planning Code establishes a requirement for Transportation Management Programs (TMP) and Transportation Brokerage Services (TBS) for office buildings in the greater downtown area (C-3 districts) and the South of Market area. The Planning Code defines C-3 as the zoning districts in the downtown area that allow major office, retail, commercial and downtown support developments. Outside of the downtown area, these programs apply to office and commercial-industrial districts and to certain retail developments within the Mission Bay Specific Plan area. Although not categorically subject to a specific Planning Code requirement, major institutions (e.g., hospitals and universities) subject to institutional master plans can also be required to provide on-site TMP and TBS, depending on the magnitude of development and anticipated transportation impacts. These requirements are imposed when an institution requests approval of building permits pursuant to its Institutional Master Plan.

b.i. General Program Requirements.

New buildings above 100,000 square feet of gross floor area in the C-3 districts in the downtown area, and above 25,000 square feet of gross floor area in the South of Market area, are required to provide on-site TMP and TBS for the lifetime of the project. The TMP and the TBS requirements are established in the Developer's Manual, entitled "Transportation Management Programs in Greater Downtown: Developer's Manual for Procedures and Performance Criteria".

Major institutions subject to the institutional master plan procedures are encouraged to provide on-site TMP and TBS. The TMP and TBS guidelines for institutions are established in a report entitled "Transportation Management Program Reporting Requirements for Institutions".

In the Mission Bay Plan, office and commercial-industrial developments of at least 50,000 square feet are required to provide on-site TMP and TBS for the lifetime of the project, and to participate in a TMP developed and implemented for the area as a whole. Certain retail projects of at least 15,000 square feet are also required to participate in the TMP.

The TMP and TBS are designed to:

a. Promote and coordinate effective and efficient use of transit by office tenants, institutions and their employees, including the provision of transit information and on-site sale of transit passes;

b. Promote and coordinate ridesharing activities for employees at each office building and institution;

c. Reduce parking demand and ensure the proper and most efficient use of on-site or off-site parking;

d. Promote coordinated flextime or staggered work hours to more evenly distribute the arrival and departure times of employees, during peak commute periods; and

e. Participate in networks with providers of transportation brokerage services from other downtown office buildings and major institutions to promote common commute alternative objectives.

b.ii. ***Greater Downtown TMP and TBS Program Requirements - Mandated & Voluntary***

Under the "Developer's Manual" the project owner is *required* to:

a. Designate a permanent **Transportation Management Coordinator (TMC)** to comply with reporting requirements, to develop and implement parking plans, and to provide oversight and management for the program.

   For buildings with parking, the TMC is required to submit a Parking Management Plan (PMP) to be reviewed and approved by the Department of City Planning. The parking plan should allocate parking among various users such as short-term, handicapped, carpools, vanpools and bicycles. The PMP should provide a plan to market preferential on-site parking for carpools and vanpools. Issuance of long-term parking leases is limited to the employees of the building.

b. Provide permanent **Transportation Brokerage Services.** Overall program marketing, transit pass sales and promotion, ridematching, management and biennial administration of surveys regarding employee commute behavior, are all examples of transportation brokerage functions.

Under the "Institutions' Reporting Guidelines", every affected institution is *encouraged* to provide:

a. Transportation Coordination for oversight and management of all aspects of the institution's transportation programs performed by a designated Transportation Coordinator. The Transportation Coordinator sets direction and monitors parking policies. For buildings providing parking, a Parking Management Plan (PMP) is required. The PMP should include policies ranging from the pricing of parking to the allocation of parking spaces.

b. Transportation Brokerage for day-to-day administration of the institution's TSM programs. Overall program marketing, transit pass sales and promotion, ridematching, and biennial administration of surveys regarding employee commute habits are all examples of transportation brokerage functions.

b.iii. *Mission Bay TMP and TBS Requirements*
Requirements for TMP and TBS in Mission Bay generally follow those established for C-3 districts in the downtown area, but with specific provisions as stated in the Specific Plan.

b.iv. *Transportation Management Association (TMA)*
The Transportation Management Association of San Francisco was established in 1989. The TMA is an association of building owners and managers that coordinate and facilitate implementation of the TSM programs. Presently there are about 65 buildings in the greater downtown area with TSM requirements. About 34 buildings have joined the TMA organization.

B.2. The Transit Impact Development Fee
"The Downtown Transit Impact Development Fee" ordinance was enacted in 1981. Under this ordinance, all new or converted office spaces in the downtown area are required to pay the City a $5.00 fee per square foot, to help defray the cost of providing transit services to accommodate the trips generated as a direct result of the new development over its useful life. New office development creates new work trips, which add to the already heavy utilization of the transportation system in the downtown area during peak periods. Given the lack of slack capacity at those times, the increased ridership must be addressed through increased MUNI service frequencies. In ten years of implementation, the fee has generated approximately $71 million, which are used to partially defray these costs. Appendix 4 contains a copy of this ordinance.

B.3. Other City Ordinances and Initiatives
To improve the transit system and to encourage the use of public transit, and high occupancy vehicles, the following actions have been approved and implemented in the City:

a. Transit preferential street programs have been established to give priority to transit vehicles where conflicts with auto traffic occur, and to reduce transit delays. In addition, all-day bus-only lanes have been designated on ten streets in the downtown :

Sutter Street - Sansome to Gough
Post Street - Gough to Market
Geary Street - Kearny to Gough
O'Farrell Street - Hyde to Powell
Mission Street - Main to 4th
4th Street - Berry to King
First Street - Market to Mission
Fremont Street - Mission to Market
Stockton Street - Tunnel under Bush St. to O'Farrell
Sacramento Street - Drumm to Kearny

b. Exclusive Rights of Way have been established for cable cars on Powell Street from Market to Ellis, California to Sutter, and the northern half block from Francisco to Bay, and for streetcars on Judah Street from 9th to 19th Avenues.

c. In order to increase transit speed, parking is prohibited during peak hours on transit oriented streets with heavy traffic volumes.

d. Bus bulbs have been installed on congested streets such as Polk and Stockton Streets to improve passenger boarding, and to reduce travel time by eliminating the time needed for buses to pull into and away from the curb at bus stops.

e. Median islands have been installed for use as bus stops on Market Street, to better utilize curb space and improve transit operating efficiency.

f. Transit signal pre-emption equipment, consolidation and relocation of transit stops, and increased enforcement of parking regulations to allow buses to move more smoothly are additional measures taken by the City to improve transit system operations.

g. Residential Parking Permit programs in the neighborhoods surrounding institutions and neighborhood commercial districts serve to control and discourage all-day free parking for the employees working in those areas.

h. The Planning Commission adopted a formal policy to allocate a percentage of parking for office buildings in the downtown area to carpool and vanpool parking.

i. For purposes of priority parking, the Mission Bay Plan defines carpools and vanpools as a minimum of three persons per vehicle, compared to the two persons per vehicle generally used in the Bay Area.

j. A 25 percent tax is imposed on all off-street parking fees. This tax significantly increases the cost of parking and therefore discourages travel by single-occupant automobile.

k. With the passage of a 1/2 ¢ sales tax enacted by the City in 1989, funding for many transportation projects and programs has been assured. Sixty percent of the approximately $1 Billion generated by the sales tax over the next 20 years will be allocated to transit projects and programs, eight percent will be used for paratransit, and an additional two percent will fund TSM programs.

l. During September 1993, the City recruited a Commute Coordinator to deal with the transportation needs of the 30,000 employees of the City and County of San Francisco.

m. The Department of Parking and Traffic is currently working with Caltrans to provide further HOV lane use incentives by expanding HOV evening hours from the current 4-6 pm to 3:30 to 7 pm. This includes signage improvements, as well. Carpool drop-off areas are located on Howard St. near Folsom, and low cost ($12/yr.) vanpool parking areas exist along Folsom, Washington, Broadway and McAllister streets.

n. Parking control officers are posted at congested intersections to prevent gridlock during p.m. peak periods. The Department of Parking and Traffic also has in place an aggressive double parking prevention and enforcement program, citing and towing offending vehicles.

4. HOUSING AND EMPLOYMENT BALANCE

Downtown San Francisco has the largest concentration of commercial activity and employment in the Bay Region. Much of the downtown employment growth occurred in the 1970-79 period. During that time about 100,000 new jobs were created and about 11,300 net new residential units were built in the City. For each 100 new jobs created in the city about 11 net new residential units were built during this period. This attracted many new workers from the region and significantly increased the number of suburban commuters into the City.

During the 1980's the rate of downtown employment growth has decreased. At the same time, compared to the previous decade, more housing units have been built relative to the amount of employment added. This has resulted in fewer commute trips per new job created. During the 1980-1989 period about 14,100 new jobs and 12,250 net new residential units were created in the City. This works out to about 87 net new housing unit built for every 100 new jobs created during this period.

It has also been the City's policy in recent years to promote new housing in conjunction with new developments. Presently there are established housing requirements for new office buildings in the downtown area. Section 313.3 of the Planning Code, the Office/Affordable Housing Production Program (OAHPP) imposes housing requirements for buildings above 25,000 square feet of office space. Under this Section the project sponsor is required to either build housing at a rate of 38.6 units per 100,000 square feet of office, or pay $7.20 per square foot to a housing developer to construct housing, or pay an in-lieu fee to the city-wide Affordable Housing Fund. OAHPP requires 62 percent of the units to be allocated for low or moderate income housing.

Extensive rezonings undertaken in the city during 1980's have also actively promoted new residential development. The Downtown Plan, as well as the plans for Rincon Hill, North of Market, Chinatown, Neighborhood Commercial, Van Ness Avenue, and South of Market, all have measures to retain and increase residential development. The Mission Bay project alone will add 8,520 new residential units in conjunction with the commercial development.

5. Relationship Of Travel Demand Management Activities To Air Quality Improvement Efforts

A. Transportation Control Measures

Under the California Clean Air Act (CCAA), all regions of the State that do not attain air quality standards fall under one of the following three designations for ozone: moderate, serious, severe, or extreme; and under either of two designations for carbon monoxide: moderate or serious. Timelines for projected attainment of air quality standards are associated with each designation. The Bay Area is considered a serious non-attainment area: projections for 1997 show that the region will be unable to meet air quality standards for carbon monoxide, reactive hydrocarbons and nitrogen oxides irrespective of the strategy used. All non-attainment areas classified as severe are also required to reduce pollutant emissions by five percent per year. If this is not possible they are to implement all "feasible measures" to reduce emissions. The Bay Area also exceeds State standards for particulate matter, but is not required to meet these standards.

As required by the CCAA, in 1991 the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD) and the Metropolitan Transportation Commission (MTC), jointly prepared the Bay Area Clean Air Plan. In addition to the air quality controls proposed for the Bay Area to reduce the *amount of emissions* per vehicle for each mile driven (known as mobile source controls), there are also measures which seek to reduce the total *number of trips* and miles traveled, better known as Transportation Control Measures (TCM's). The MTC has taken the lead in the region for development of a TCM Plan which responds to both State and Federal air quality requirements. The TCM Plan has been reviewed and revised by the BAAQMD and it is referenced in the Bay Area Clean Air Plan.

The TCM Plan has three major components:

Phase 1: Reasonably available TCMs that are based on existing authority and funding - Implementation by 1994.

Phase 2: Additional mobility, traffic operations and incentive package which requires new legislative authority and funding - Implementation by 1997.

Phase 3: Market based TCMs which also require authorizing legislation, with the exception of parking management - Implementation by 2000.

Local agencies are expected to incorporate these TCMs into planning and implementation for transportation and land use programs. The region, through the MTC, is held responsible for overall progress toward the stated goals. The CMP process provides an opportunity to integrate local planning and programming into the regional air quality planning process.

Appendix VII provides a listing of regional TCMs and discusses how San Francisco's congestion management strategies contribute to, or reinforce these measures. Among the TCMs implemented by San Francisco are parking management and pricing rules, which are considered Phase 3 measures.

B. Regulation 13, Rule 1 (BAAQMD) - San Francisco's Demonstration of Compliance

Under Rule 1 of the BAAQMD's Regulation 13, adopted in December 1992, Bay Area employers with 100 or more employees at a single work site must develop programs that encourage employees to use alternative modes of transportation, such as transit, carpooling, biking, or walking, to reduce drive-alone commuting. The Rule, which affects approximately 4,000 work sites, and about half of all employees in the Bay Area, established average vehicle ridership (AVR) standards for the region based on the relative density of development and level of available transit service in each subregion. For San Francisco, the 1999 AVR goal was set at 2.5 commuters per private vehicle for the Northeast Quadrant, including downtown; and 1.5 for the rest of the city. In an effort to provide some flexibility to cities that have invested in transportation alternatives in the past, the BAAQMD included a provision allowing a jurisdiction to demonstrate that the 1999 AVR goals are currently met for all affected work sites within its geographic area.

In 1992 the Authority, in conjunction with the Public Utilities Commission (PUC) funded two citywide travel behavior surveys, one focused on randomly selected work sites, and the other one centered on visitor travel behavior. Both surveys were conducted by the Department of City Planning. The work trip survey determined that, on average, San Francisco businesses already exceed the BAAQMD's standards for 1999, a finding that clearly reflects the City's commitment to transit investment over many decades. In light of the survey's results the BAAQMD determined that work sites located in San Francisco would not be subject to Rule 1 through 1995.

In March/May 1995, the Authority funded and conducted the 1995 Citywide Travel Behavior Survey (CTBS). The survey involved participation by more than 60 large employers (100 or more employees per work site), but it also targeted over 150 medium and small-size employers (less than 100 employees per work site) citywide. More than 10,000 responses were received and processed, making the CTBS the most exhaustive database of citywide work-related travel behavior in the City. The information has already been incorporated into the Authority's Travel Analysis Database, and will be used in Strategic Analysis Reports, system performance investigations, and other CMP-related studies.

For the purposes of the Rule, the BAAQMD has divided San Francisco into two zones where Zone 1 is the northeast quadrant of the City including Fisherman's Wharf, Chinatown, North Beach, the financial district, and the south of Market area. The rest of the City is in Zone 2. The results of the 1995 CTBS corroborate once again that Zone 1 continues to comply with the 1999 standards set by Regulation 13, Rule 1. The results indicate that Zone 2 has met the 1997 standards set by the Rule.

The passage of SB 437 (Lewis) by the Legislature in September effectively prohibits the imposition of employer-based trip reduction requirements unless called for in Federal law. This is expected to effectively eliminate the need for further demonstrations of compliance with average vehicle ridership (AVR) standards and other related requirements contained in Regulation 13, Rule 1. The Authority will continue to work with the BAAQMD, MTC, and the Bay Area Partnership to determine the extent of necessary changes to current trip reduction programs to comply with state law, and will coordinate with affected City Departments to amend the trip reduction element of the CMP and implement any necessary changes.

6. Work Program Items - Key Milestones

- Amend the trip reduction element as necessary to reflect changes introduced by the passage of SB 437 (Lewis) - By August 1996.

CHAPTER 7

LAND USE ANALYSIS PROGRAM

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Existing Setting**
- **Institutional Framework**
- **Land Use and Transportation Analysis**
- **Implications of CMP Requirements**
- **Work Program Items**

1. Legislative Requirements

California Government Code section 65089 (b) (4) requires that Congestion Management Programs include a program to analyze the impacts on regional transportation systems of land use decisions made by local jurisdictions. The analyses required under this program must also include estimates of the cost of measures necessary to mitigate the transportation impacts identified.

Under the CMP law local jurisdictions retain their role in land use decision-making, as well as in determining charges to land development proponents to mitigate local transportation impacts associated with their proposals. However, Congestion Management Agencies are required to apply certain sanctions if local agencies do not comply with the requirements of CMP law. The statutes further state (same section) that "This program shall measure, to the extent possible, the impact to the transportation system using the performance measures described in paragraph (2)." And that "The program shall provide credit for local public and private contributions to improvements to regional transportation systems."

2. Legislative Intent and Application to San Francisco

The intent of the legislative requirement for a CMP-based land use analysis program is to establish a direct connection between land development decisions and proposed improvements to the regional transportation system. In principle the connection already exists at the local and regional levels. At the local level it takes the form of plans and fees for mitigation of local transportation impacts. At the regional level it is formalized in MTC's Regional Transportation Plan, which links long-range planning for transportation investment with estimates of land development based on regional demographic growth and economic development. The CMP institutionalizes this linkage at the subregional level.

The land use analysis program for San Francisco is focused on strategically assessing the cumulative impacts of land development proposals on the viability of the designated CMP network. This also includes the evaluation of impacts that cross county lines, affecting congestion management efforts by other congestion management agencies in the region. The analysis performed as part of this element informs the transportation investment recommendations in the Capital Improvement Program, and it identifies areas of the transportation network where existing deficiencies are likely to worsen or where new deficiencies are expected to materialize. This program is not intended to replace local analysis. Rather, it uses local analysis data as an input into the system-level evaluation of subregional impacts. In the same vein, the program is not intended to add a new layer of complexity to the land development review process in the city; instead, it takes advantage of information already available, for the most part, through the local and regional analysis processes, but it analyzes it from a different perspective.

California Government Code Section 65089(b)(4) requires the land use program to assess the impacts of land development on "regional transportation systems". In the 1991 San Francisco CMP this was interpreted to mean impacts on the CMP roadway network. However, the new federal Intermodal Surface Transportation Efficiency Act (ISTEA), passed in 1991, explicitly requires the development of a metropolitan transportation system (MTS), including both transit and highways. The Metropolitan Transportation Commission has contracted with the San Francisco Transportation Authority, acting as congestion management agency to, among other activities, help develop the MTS and to use the CMP process to link land development decisions to impacts on the MTS. For purposes of the land use analysis program, the 1995 San Francisco CMP will use the San Francisco component of the MTS, but conformance with the roadway LOS standards will continue to be assessed using the CMP roadway network, which is a subset of the MTS.

3. Existing Setting

This section provides background on land use trends in the city. San Francisco established itself as the region's central city during the Gold Rush era. It has retained its role as the most concentrated center of employment as the region has evolved. San Francisco's peninsular location and small size, approximately 49 square miles, have forced a close relationship between the City's development patterns and its transportation network. There have been significant numbers of suburban commuters into the City for over a century. San Francisco has been able to maintain one of the highest percentages of transit use among U.S. cities because size constraints resulted in relatively high density development, and topography and geography limited access routes to and from the City.

In recent decades, an increasing amount of population and employment growth has occurred throughout the region. Back office, manufacturing, wholesale trade, warehousing, and general retail employment has grown faster in the East Bay and South Bay than in the City. However, San Francisco has remained the region's dominant employment center for middle and upper level office and administrative functions, specialty retail, and other jobs dependent upon direct transactional activities. San Francisco's daytime population is double its resident population, and about half of its 575,000 jobs are filled by suburban commuters. Transit and ridesharing currently account for about 76 percent of all commuter travel in the San Francisco downtown office district, which contrasts with 11 percent transit use for the entire Bay Area region.

During the 1980's, San Francisco actively promoted new residential development. Extensive revisions to the City's Master Plan and rezonings were undertaken. Each of these land use plans - the Downtown Plan, Rincon Hill, North of Market, Chinatown, Neighborhood Commercial, Van Ness Avenue, South of Market, and Mission Bay -incorporated measures to retain and enhance opportunities for residential development. In addition, housing development has been promoted by the policies of the San Francisco Redevelopment Agency in the Rincon Point/South Beach, Yerba Buena Center, and the Western Addition Redevelopment Plan Areas. Together, these policies have resulted in a net gain of over 8,500 housing units since 1985, which represents about a seventy percent annual increase in housing production compared to the previous fifteen years. In a regional context, San Francisco ranked fourth among Bay Area cities, behind San Jose, Fremont, and Santa Rosa, in the amount of new housing built since 1980.

Institutional Framework

This section describes the institutional parameters that frame the City's process for reviewing land development impacts on the transportation network. San Francisco is a Charter City and has a consolidated city and county government. An eleven-member Board of Supervisors serves as the legislative body for the City's unified city and county government. The City Planning Commission (CPC) has responsibility for land use decision-making throughout the City. Five of the seven members of the CPC are appointed by the Mayor. In addition, there is a representative from the local Public Utilities Commission and the Chief Administrative Officer. Among the responsibilities of the CPC are the following:

- Exclusive authority to act on General Plan policies and area land use plans (per City Charter);
- Holding public hearings on all appeals to Negative Declaration determinations and certification of all local Environmental Impact Reports;
- Discretionary development decisions under the City Planning Code (e.g., Use cases, which can be appealed to the Board of Supervisors under certain circumstances) and under the City Charter (e.g., Discretionary Review of building permit applications).

In addition, all subdivisions of five or more lots and all rezonings must be approved by both the CPC and the Board of Supervisors.

City departments involved in transportation activities are: the Department of City Planning (Transportation Section), which has primary responsibility for assessment of the transportation impacts of development proposals, to determine consistency with land use and transportation policies in the General Plan, and for coordination with other City departments which provide transportation services; the Municipal Railway, which operates an extensive streetcar, cable car, trolley coach, and diesel bus transit network within San Francisco; the Department of Parking and Traffic, which was created in July 1990 to manage City off-street and on-street parking, parking enforcement, and traffic engineering activities consistent with the City's Transit First policies; and the Department of Public Works, which has retained responsibility for street cleaning, maintenance, repair, and contract management affecting streets and infrastructure. Each of these departments are integral parts of the City's governmental structure, and all ultimately report to the Mayor and the Board of Supervisors. Other entities influencing transportation and land use in the city are the Redevelopment Agency, and the Chief Administrator's Office, which is currently coordinating the construction of waterfront projects, including the new Embarcadero Roadway, the MUNI Metro Turnback, and the Terminal Separator Structure.

The San Francisco County Transportation Authority was established as an independent agency to administer Proposition B, the funding program generated from passage of a new one-half cent sales tax for transit, roadway, bicycle and pedestrian projects. All members of the San Francisco Board of Supervisors serve on the Authority Board of Commissioners. The Authority has also been designated as the local Congestion Management Agency (CMA) for San Francisco. Pursuant to this designation, the Authority has certain duties and responsibilities to ensure that the city complies with state-mandated CMP requirements. Such responsibilities include, among others, the development of a methodology for land use impacts, and the creation of a uniform database for land use impacts analysis. For a detailed discussion of the roles and responsibilities of the Authority, please refer to Chapter 2.

5. Land Use and Transportation Analysis

a. Current Practice

The transportation implications of proposed development and of prospective land use changes are currently assessed within the framework of the California Environmental Quality Act (CEQA). The Office of Environmental Review (OER) within the Department of City Planning serves as the City's lead and responsible agency for conducting environmental assessments. Determination of transportation impacts associated with land use changes is an integral part of the environmental review process. Transportation impact analyses are mandated not only based on traffic increases which exceed specified thresholds but also are necessary whenever transit operations, pedestrian facilities, or loading needs may be adversely affected. Exacting published guidelines (Appendix V) detail a consistent methodology in the assessment of land use effects on the entire transportation system. It is a well-established procedure in the local approval process to require project sponsors to finance the mitigation of localized and areawide impacts expected to be generated by their projects. A Transit Impact Development Fee of five dollars per net new gross square feet for downtown office space is mandatory to offset the increased marginal costs for provision of additional peak period transit service. Mitigation by developers helps to defray the costs of public improvements needed as a result of land use decisions.

Long-range development potential and associated cumulative transportation impacts have been assessed in conjunction with land use plans and rezonings for many areas of the City. Models have been developed for the Downtown Plan, South of Market, and Mission Bay EIR's to provide a comprehensive framework for the analysis of the effects of land use changes upon the transportation system of the greater downtown area. Sub-area modeling has also been used in conjunction with land use rezonings for Chinatown and Van Ness Avenue. Potential transportation impacts generated by new development proposals are assessed within the cumulative framework for each sub-area which has been modeled.

b. Comparison of Local and CMP Impact Analysis Levels

The emphasis of the CMP land use impacts analysis program is on addressing system-level impacts typically not discussed in depth as part of the local impacts analysis process. As described above, San Francisco has made considerable efforts in developing a comprehensive framework for transportation impacts analysis, particularly because of the scale and pace of development experienced over the last three decades. However, further effort will be necessary to adapt the City's analysis process to the requirements of CMP law. For example, no citywide model which integrates land use with the entire transportation network currently exists for San Francisco. The current land use impacts analysis method therefore cannot accurately assign impacts associated with San Francisco development to the regional transportation network beyond a certain distance from the proposed development, and generally not beyond the city's boundaries. Similarly, while there is considerable fragmentary evidence that through traffic increasingly contributes to congestion, it is not currently possible to identify the magnitude of the effects of development elsewhere in the region upon San Francisco. The City does have access to travel demand forecast data produced with the computerized regional travel demand model developed by the Metropolitan Transportation Commission, but the data is of limited use. For a discussion of currently available travel demand forecasting models and their applicability to San Francisco's needs, please refer to Chapter 10.

c. CMP Land Use Impacts Analysis - Methodology Development

To ensure compliance with state and federal mandates regarding congestion management, the Authority must develop and adopt a methodology for analysis of impacts of land use decisions on the regional transportation network. As stated above, this method should be a refinement of the current process used by the city, and it should build as far as possible on existing resources and data. It is important to emphasize that this methodology must be developed to satisfy CMP analysis requirements only. It is expected that the City will give due consideration to the results of CMP-generated analyses of transportation impacts, however, as established in state law, the City retains its full jurisdiction over the land development approval process.

During 1994-5 the Authority worked, in coordination with City departments, to develop and adopt a land use analysis methodology and guidelines to be followed for CMP-related analysis, including any needed modifications to the current land use analysis process. Development of these guidelines was undertaken, through a consultant contract, concurrently with the development of guidelines for travel demand analysis and deficiency planning. Specification and development of the Authority's new Travel Analysis Database was also part of this effort.

The methodology development process for land use analysis impacts focused on the following key areas:

- determination of the appropriate level and thresholds for analysis, including types of land use proposals to be addressed as part of the CMP process (i.e., project scale, general plan amendments, redevelopment initiatives, etc.)
- determination of the desired frequency of CMP cumulative impacts analysis;
- determination of target years for analysis;
- criteria for assumptions about improvements to the transportation network (coordination with the Capital Improvements Program and other programming and funding mechanisms and timetables);
- scoping of data needs for CMP-level analysis, including database update frequency and contents (closely coordinated with the development of the travel demand methodology);
- modifications to the existing data collection process to satisfy CMP-related needs; and
- use of impact analysis results and land use data for the development of Strategic Analysis Reports.

While the methodology for Deficiency Planning has been completed (see Chapter 9), additional effort is needed to reach agreement with the Planning Department on the methodology and process for land use impacts analysis. Consequently, the Authority will continue its interim approach as described in Section d below.

d. Timetable for Implementation and Interim Approach

It is proposed that the new methodology and guidelines for land use impacts analysis be finalized by April 1996, and adopted by the Authority Board by June 1996. Until then the current local land use analysis process (see Appendix V) will be used as the interim land use analysis approach for CMP purposes.

6. Implications of CMP Requirements

CMP requirements are not expected to change the existing governmental structure for land use decision-making. San Francisco's unified city-county government has already consolidated power at the county level and resolved questions of jurisdictional authority which the CMP process raises in most other counties in the state. The institutional roles of the City Planning Commission and Board of Supervisors remain unaffected.

Annual determinations of conformance with the San Francisco CMP will be made by the Authority at the countywide level. Each City department with specific transportation planning and operational responsibilities will retain its current roles. The Authority will play a central role in developing closer coordination among the departments and in integrating transportation and land use functions as part of the CMP process.

Work Program Items - Key Milestones

- Finalize Draft Land Use Impacts Analysis Guidelines - By April 1996
- Adopt Land Use Impacts Analysis Guidelines - By June 1996

CHAPTER 8

Capital Improvement Program

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Transportation Investment and System Performance**
- **CIP Components**
- **Relationship to Other Plans and Programming Documents**
- **The Authority's Capital Priorities Programming Process**
- **CIP Review and Amendment Procedures**

Sections Under Development

- *CIP Project Lists*
- *Program Overview*
  - *Roadway Projects*
  - *Waterborne Projects*
  - *Bicycle and Pedestrian Projects*
  - *Freight Projects*
- *Work Program Items - Key Milestones*

BACKGROUND

1. Legislative Requirements

California Government Code 65089(b)(5) requires that the CMP contain a seven-year Capital Improvement Program (CIP), developed by the CMA, to maintain or improve the traffic LOS and transit performance standards established in the CMP, and to address impacts on the regional network, as identified through the land use impact analysis program. Capital improvement projects must conform to air quality mitigation measures for transportation-related vehicle emissions, as detailed in the Bay Area Air Quality Management District's 1991 Clean Air Plan.

2. Legislative Intent and Application to San Francisco

The CMP legislation was formulated around a relatively simple concept: future transportation needs would be estimated through the land use analysis program, curbed to some degree through actions in the trip reduction element, and otherwise addressed through a fund programming mechanism to supply new transportation projects and services. That mechanism is the Capital Improvement Program (CIP), which ensures the steady supply of transportation improvements needed to at the same time accommodate land development and prevent congestion from worsening. The legislation defines the CIP as a seven-year program. This makes it into a medium-range programming tool, clearly not intended to replace long-range plans, but rather to provide a vehicle for implementation of improvements consistent with long-range policies.

The CIP is intended to address future problems anticipated through land use impacts analysis, rather than to react to problems already observed. The provision for deficiency plans (see Chapter 9) supports the notion that the CIP is meant to anticipate problems: deficiency plans are allowed only in cases where the CIP could not keep up with the growth of congestion in a roadway facility, and it is no longer feasible (physically or financially) to fix the problem in that facility, so improvements on other facilities are required instead.

The emphasis in CMP legislation is on expeditious delivery of transportation projects where needed. The CIP must ensure that improvements will be on the ground when needed, in order to prevent worsening of congestion. However, because of peculiarities of the funding process, new projects get programmed in the outer two years of each seven-year CIP. This makes it difficult for the CIP to immediately address newly identified needs. In order to be effective, the CIP must at the same time function as a transportation project *delivery* mechanism and as a programming framework, including a re-programming feedback loop, to ensure that changes are incorporated promptly, and that the information is always current. This kind of flexibility is essential to deal with San Francisco's complex and dynamic transportation funding program. The legislation does not provide guidance as to whether the 7-year period alluded to in the context of the CIP is a programming period or a project delivery period. The fact that programming transportation funds through the State Transportation Improvement Program (STIP) also follows a 7-year cycle gives weight to the interpretation that the CIP's 7-year period is a programming horizon. It is clear, however, that the effectiveness of the CIP (i.e., its impact on system performance) must be evaluated against the anticipated timelines for actual delivery (i.e., completion) of transportation projects and services. For projects programmed in the second half of the 7-year CIP, those delivery timelines will likely extend beyond the 7-year programming period.

3. Transportation Investment and System Performance

One of the key purposes of the CMP, as reflected by the legislation, is to establish a link between transportation investment and system performance. In fact, the 9-cent-per-gallon state fuel tax increase became politically viable in 1989 only after it was coupled with a requirement for congestion management programs. This was the Legislature's way to reassure Californians that the new revenues would be spent in ways that would make a tangible difference in people's level of mobility. Specifically, the legislation established the requirement for a 7-year Capital Improvement Program clearly intended to help maintain or improve operating conditions on the transportation system.

Furthermore, state law establishes that if the CMA finds a local jurisdiction to be in non-conformance with the CMP, the State Controller must withhold revenues from the 9-cent per gallon gas tax increase (Sections 65089.5 (b)(1) and 65089.2 (c)(1)), and the MTC cannot program (federal) Surface Transportation Program funds or Congestion Mitigation and Air Quality funds to transportation projects in that jurisdiction. With this requirement, the emphasis on system performance is effectively linked to the power of the purse: while transportation investment can be used to address a number of goals, such as community redevelopment, urban beautification, safety, and the like, the CMP *must* focus on transportation system performance, and the CIP must identify improvements that maintain or improve system performance, or the county risks a finding of non-conformance and potential loss of transportation funding.

The changes to CMP law introduced by AB 1963 in 1994 have further emphasized the focus of the CMP on performance by mandating a new "Performance Element", which replaces the Transit Element. Reaching beyond the roadway-oriented approach of the original CMP language, the new legislation requires that the Performance Element apply to a *multimodal* system which is concerned with transit, shared ride, bicycle, pedestrian and other types of trips in addition to those taken by single-occupant automobile. (For more details on this topic, please see Chapter 5.) In particular, section 65089(b)(2) explicitly requires that multimodal performance measures developed as part of the Performance Element be used to inform the decisions about the composition of the CIP.

To be sure, the CIP is not the only factor affecting system performance. Other key factors influencing the performance of San Francisco's multimodal CMP network are: land use decisions, trip reduction programs, and system operations decisions. Land use decisions and trip reduction programs affect the *demand* for transportation: development decisions result in new trips or in changes in trip patterns, and trip reduction programs hopefully result in elimination of some single-occupant automobile trips and in changes in travel behavior which affect the level and patterns of utilization of the transportation system. But the CIP is a key determinant of system performance because it can directly affect the *supply* of transportation infrastructure in the city. Because the CMP network's performance standards are predicated upon the implementation of the projects in the CIP, any proposed changes to the CIP must first be evaluated to estimate their impacts on expected system performance, to ensure that the established performance standards are maintained and that San Francisco remains in conformance with the CMP.

In addition to Chapter 4, which describes roadway LOS monitoring and standards, Chapter 5, the new Performance Element, guides the establishment of multimodal system performance standards and describes procedures for evaluating the performance of system components.

CIP CONTENTS AND CONTEXT

4. CIP Components

In order to satisfy the new requirements in state law, as described above, the CIP is redefined to contain the following components:

a) All projects and /or expenditures included in the 1991 and 1993 CMP CIPs, as amended or modified in the 1995 CMP.

b) All San Francisco transportation projects and/or expenditures programmed in the State Transportation Improvement Program (STIP), other than in (a).

c) All San Francisco transportation projects and/or expenditures programmed in the federal Transportation Improvement Program (TIP), other than in (a).

d) All projects contained in the 1993 Proposition B Strategic Plan, as amended as part of the 1995 update.

e) All projects in the AB 434 program for San Francisco which were programmed by the Authority as part of the 40% discretionary portion.

For a detailed discussion of the Authority's process for review and approval of CIP changes, please refer to Section 7: "CIP Review and Amendment Procedures".

5. Relationship to Other Plans and Programming Documents

5.1. Relationship to the Countywide Long-Range Transportation Plan

The CIP is the most significant implementation tool of the CMP. Pursuant to State law, in order to be included in the Regional Transportation Improvement Program, and therefore be eligible to receive state and federal funds, a project must first be included in the CIP. In addition, the CIP is a 7-year document, designed to ensure the delivery of transportation projects needed to maintain system performance. The CIP is intended to serve as a short or medium-range implementation vehicle for a longer range list of priority projects, such as would be provided by a long-range countywide transportation plan.

Currently there is no long-range countywide transportation plan for San Francisco. The City's Master Plan includes a Transportation Element, updated in July 1995, which contains 40 general objectives and 200 associated policies. Although not required by law, a long range plan would look at the potential impacts of those policies, address trade-offs between them, establish priorities, and develop a specific list of investments to implement the prioritized policies. Under state law, the Authority, as CMA, is responsible for the eventual preparation of a long range countywide transportation plan. When such a plan is developed, the plan's action element will include a list of specific investment priorities (i.e., transportation projects and services). By following that list, the CIP will then become the main implementation tool for the countywide transportation plan. Until a countywide plan is developed, the Authority will continue to develop the CIP project priorities based on its analysis of need, system performance, and programming and funding strategy.

5.2. Relationship to the Proposition B Strategic Plan

Proposition B is the half-cent local sales tax for transportation, approved by San Francisco voters in 1989. Prop. B, as presented to the voters, includes an Expenditure Plan detailing specific projects which are eligible for the new sales tax revenues. The Proposition will be in place for 20 years from the date of inception. It is expected to generate close to $1 billion for transportation projects in San Francisco. The significance of these revenues is that they are used, in part, to provide the matching funds required to attract state and federal dollars. Depending on the funding program, the proportion may be as low as 11.5% local to 88.5% federal. This is the "leveraging" effect of the Prop. B dollars. In addition, some Prop. B revenues are used to pay entirely for certain projects which are of local interest but do not compete well for state or federal funding.

The Prop. B Expenditure Plan did not earmark all transportation sales tax revenues to specific projects. Rather, it established four categories of investment and attached mandatory percentage shares of total Prop B revenues, as shown below:

Transit	60%
Streets & Traffic Safety	30%
Paratransit	8%
Transportation Systems Management (TSM)	2%

In order to achieve these goals while maximizing San Francisco's ability to leverage state and federal dollars, the Authority developed the first Prop. B Strategic Plan in 1993, and updated it in 1995. The Strategic Plan established a requirement for 5-year investment plans from City Departments requesting Prop. B funding for their projects. This requirement is intended to provide the Authority with an accurate picture of anticipated transportation funding needs, which are then reconciled with expected revenues to arrive at the most favorable financial strategy for San Francisco's transportation program.

While the 9-year Prop. B Strategic Plan is designed to identify the best possible funding and financing strategy for San Francisco's transportation program, and while the Departments 5-year plans are designed to provide a picture of investment need in each transportation area (transit, roads, etc.), the CIP, because of its focus on system performance, serves as a framework for analysis of trade offs among proposed transportation projects which receive Proposition B and other funds. Beyond the analysis of funding feasibility or financial strategy, *the CIP ensures that the proposed investments will result in tangible improvements in mobility* for people using San Francisco's multimodal transportation system. The CMP's overriding emphasis on mobility improvement may from time to time trigger adjustments to the Prop. B Strategic Plan.

5.3. Relationship to the RTP

The Authority, as CMA, provides input to the Metropolitan Transportation Commission (MTC) for the periodic updates of the Regional Transportation Plan (RTP). State law provides that where countywide transportation plans have been developed, they will be used by MTC as a basis for RTP assumptions for that county. In the absence of a long range countywide plan, the CIP, complemented by the Proposition B Strategic Plan, serves as a main indicator of transportation investment priority trends in San Francisco.

5.4. Relationship to the RTIP

Pursuant to state law, the CIP list of projects is used by MTC in compiling the biennial Regional Transportation Improvement Program (RTIP), which in turn feeds into the State Transportation Improvement Program (STIP) and the Federal Transportation Improvement Program (TIP). Under state law, projects proposed for funding through specific federal sources programmed through the STIP/TIP must first be included in the CMP's Capital Improvement Program.

5.5. Relationship to the San Francisco Master Plan

The San Francisco City Charter assigns responsibility to the Planning Department for consistency review of capital improvements with the Master Plan. This consistency review function is incorporated into the Authority's programming process as described in Section 6 below. The Planning Department, in consultation with the Authority, will develop specific criteria for the review of the Draft CIP list's consistency with the Master Plan. In order to be used in the current TIP programming cycle, these criteria and procedures must be in place by January 1, 1996.

5.6. Relationship to City Department Activities

The changes in the programming introduced by the 1995 CMP, as explained in this chapter, do not substantially alter programming-related activities currently performed by City departments. The goal of the new process is, in fact, to streamline the programming process so that complete and timely information is available to the Authority Board, to provide a well defined context that facilitates strategic programming policy decisions.

It is important to note, for example, that individual City departments will continue to develop their own capital investment plans. The Authority's intent is not to suggest changes to the priorities within those plans, but rather to steer the overall programming strategy and analysis of trade-offs.

The Authority review process, as explained in the following sections, provides the required structure to analyze programming and performance data that will inform those Authority Board decisions. It is important to note that the process is intended to function using information already developed by city Departments, and that except as requested by the Authority Board, no new information will be required.

The most significant value added by the Authority's review process is in providing an overall context for programming strategy and system performance, to facilitate Authority Board decisions.

Exhibit 8-A provides a summary of key roles and responsibilities of the Authority and City Departments in the transportation programming process.

5.7 Relationship to Short Range Transit Plans

In addition to MUNI, five regional transit operators serve San Francisco: BART, AC Transit, SamTrans, Golden Gate Transit, and CalTrain. The Short Range Transit Plans (SRTPs) developed by these operators are the basis for their programming requests to the Authority for inclusion in the San Francisco CIP.

The Authority uses the SRTPs as an input into its programming process, to ensure better coordination of San Francisco programming decisions with regional priorities.

Exhibit 8-A

Transportation Programming Roles and Responsibilities

A. City Departments

1. Prepare plans, prioritize capital improvement programs and financial plans on an annual basis
2. Use financial constraints and strategies imposed by external agencies plus those agreed to by the Authority and Departments for various funding sources
3. Revise financial plans at regular intervals, to reflect changes in project scope, budget or schedule, and changes in funding projections
4. Process CIP Amendments through the Authority, and obtain Authority Board approval or administrative review before submittal of new information to outside agencies
5. Check eligible project list consistency with the San Francisco Master Plan before adoption by Authority Board. (Performed by the Planning Department)

B. Authority

1. Develop, adopt and update the CMP and its CIP
2. Process CIP Amendments according to the established procedures
3. Input into the MTC, and state and federal agencies process for the preparation and updates of the Regional, State and Federal Transportation Improvement Programs (RTIP, STIP and TIP).
4. Provide Prop. B revenue estimates and advise on financial strategies
5. Develop Strategic Plan updates to respond to revisions in Department capital and financial plans and to reflect CIP Amendment decisions
6. Notify outside programming agencies of decisions on CIP Amendments
7. Program the local (40%) portion of the AB 434 clean air funds

6. The Authority's Capital Priorities Programming Process

Figure 8.1 describes the Authority's Capital Priorities Programming Process. Because of the Authority's combined role as Prop. B administrator and CMA, this process, though focused on funds that are required by state law to be programmed through the CMP, also incorporates Proposition B strategy.

The process starts with an evaluation of transportation demand or need, as evidenced by two general categories of information: programming requests from City Departments and other transportation agencies; and data about expected travel patterns and monitoring of system performance. At the center of this evaluation are the CMP's multimodal system performance standards, which provide guidance on what constitutes an *acceptable* level of mobility, for example: should the level of service on the roadway network be set at "E" (congested) or at "B" (almost free-flow), or should transit service headways be 20 minutes or 5 minutes.

The multimodal performance standards are a *policy* decision, arrived at by weighing what kinds and amounts of transportation we would *like* against how much of it we can *afford*, and against other competing policy objectives (such as air quality or other environmental or community impacts). This requires coordination with Master Plan goals and objectives and it necessitates periodic consultation with MUNI and other transit providers serving San Francisco, to ensure that the established standards are realistic and can be met. The Authority's Capital Priorities process takes into account those standards, as well as current information from the Authority's own monitoring of project delivery (to further understand potential impacts on system performance), and draws up a list of transportation investment priorities that considers Prop. B financing strategy, regional prioritization criteria (to ensure that San Francisco projects will compete well for state and federal funds), and adjusts the list to revenue projections for Prop. B and state and federal funding sources. The result is the recommended CIP list, which is adopted by the Authority Board and submitted to MTC.

The CIP list then enters the regional prioritization process, where San Francisco projects compete with projects from the other eight Bay Area counties for state and federal funds. The result of this process is a final regional priorities list, which is adopted as part of the Regional Transportation Improvement Program (RTIP) which, in turn, becomes the basis for the State Transportation Improvement Program (STIP) and for the federal Transportation Improvement Program (TIP) for California. San Francisco projects included in the STIP and TIP will then be ready to receive state and federal funds.

At this point, there is an important feedback loop that takes place as part of the Authority's programming process. Programming documents and performance standards will need to be adjusted to reflect the projects that did *not* receive funding. For example, if a project in MUNI's Short Range Transit Plan (SRTP) does not receive federal funds, it may become infeasible, or it may require a change in the Authority's Strategic Plan to devote more Prop. B funds to close the gap left by the lack of federal funds, and it may require re-prioritization or rescheduling of other MUNI projects to ensure that system performance is maintained. This step is therefore essential to reconcile transportation investment and transportation system performance.

6.1. CIP Development - Schedule

6.1.1. Programming of CMP-Based Funds

For funding sources subject to programming through the CMP by state law, the CIP development process follows the biennial CMP cycle. Pursuant to regional agreements, development of the CIP is ideally tied to the development of the STIP and the TIP. It starts with a call for projects, issued by the Authority, as CMA, around September/October of the first year of the cycle.

Project sponsors submit applications in the regionally developed standard format for state Flexible Congestion Relief (FCR) and federal STP and CMAQ funds. Project sponsors are responsible for scoring their proposed projects according to the rules detailed in the application packet. Project sponsors typically have about two months to complete this step. The Authority screens all projects for eligibility, checks project scores, reconciles funding assumptions with the Prop. B Strategic Plan, develops a draft eligible project list for San Francisco. At this point the list is submitted to the Planning Department for a consistency check with the Master Plan. The Authority has approximately one month to complete its review (including Master Plan consistency input from the Planning Department and evaluation of system performance), adopt the prioritized draft CIP list, and submit it to MTC for the regional competitive process. After clarification is sought from project sponsors on any project details affecting scores, a draft regional list is developed in June and adopted by MTC in July of the following year. The state and federal approval of the TIP happens in September/October.

The final list for San Francisco is adopted by the Authority Board, and it becomes the final CIP list for the biennial CMP cycle. CMP updates, addressing not just the CIP but the entire CMP document, as necessary, are also adopted in October/November of the second year of each biennial cycle.

IMPORTANT NOTE:

Because of funding shortfalls in the State Highway Account, there will not be any (state) FCR funds available for the current (1995) CMP cycle. The availability of (federal) CMAQ funds is now in question because of the re-designation of the Bay Area as an "attainment area" for air quality purposes. The final 1995 CMP language will need to reflect any changes to this situation that may result from special relief language introduced in the National Highway System bill, currently pending in Congress. In the worst of cases, the call for projects for the current cycle will pertain only to STP funds.

Adding to this difficult situation, the Intermodal Surface Transportation and Efficiency Act of 1991 (ISTEA) is up for reauthorization in Congress. It is assumed that Congress will reauthorize ISTEA at a similar funding level as the original Act, but discussions are still underway. Because of these considerations, and because of the need to comply with state law requiring MTC to submit a Regional Transportation Improvement Program to Caltrans by November 11, 1995, the region decided to treat the state and federal programming processes separately for this biennial cycle. Therefore the CMP CIP contains only minor modifications to the 1993 version, as shown in Tables 8-A, 8-B, and 8-C. The call for projects (for federal funding) took place on October 1, 1995. This means that the 1995 San Francisco CIP will need to be amended by June 1996, before the regional list for the (federal) TIP is adopted.

6.1.2. Programming of Other Funds

SECTION UNDER DEVELOPMENT

7. CIP Review and Amendment Procedures

Changes to the CIP project list, that need to be processed outside the biennial CMP updates, are subject to administrative review and in some cases must be approved by the Authority Board through CIP Amendments.

7.1. Applicability

The previous sections describe the central role of the CMP in establishing standards and measuring or otherwise assessing the performance of the multimodal transportation system, and the role of the CIP in helping to maintain that level of performance. Any proposed changes to projects included in the CIP must therefore first be assessed by the Authority, for potential effects on the performance of the multimodal transportation system. This requirement applies to changes in the scope, schedule, or programming package for all CIP components, as described in Section 4: "CIP Components." Because project viability can be affected by changes in any component of its funding package, the requirement for Authority review applies to all funding components of CIP projects, whether they are directly programmed by the Authority or not.

The Authority's review process applies not just to proposed programming changes to the CIP, but also to initial programming applications for funds not directly administered by the Authority, but which are part of the CIP (see Section 4). Note that this requirement applies to the programming of funds, not to applications for receipt of already programmed funds (also known as "grant applications"). This is true unless the grant application introduces changes in programming.

7.2. Kinds of Amendments

There are two kinds of CIP Amendments: policy level and administrative level.

7.2.1. Policy-level CIP Amendments

These apply to changes that are deemed by the Authority to be significant enough that they have the potential to affect the performance of the multimodal transportation system.

Policy-level CIP Amendments are required for all programming or schedule changes to CIP projects where the change will affect the scope of the project, or the year of delivery (completion) of the project, or the amount or availability of operating funds for that project, or the year of programming of Authority-programmed funds for that project, or the fund source designation or any other aspect of the funding packet requiring action by the Metropolitan Transportation Commission (MTC), or the California Transportation Commission.

Policy level CIP Amendments require approval by the Authority Board prior to processing of the change by the implementing department. The requirement for policy level CIP Amendments will apply to all pertinent actions (as noted above) for at least the following funding sources: STP, CMAQ, FCR, State TSM, FTA Sections 3 and 9, State Rail Bonds (Props. 108 and 116), and Emergency Relief Funds.

7.2.2. Administrative level CIP Amendments

These apply mostly to programming changes which can alter the overall transportation programming strategy for San Francisco, even though their individual effects on system performance may only be very marginal. Such programming changes will trigger the need for administrative level CIP review even if they are not tied to a specific project listed in the CIP, as long as they affect San Francisco's share of a transportation funding source listed in the CIP.

Administrative level CIP Amendments will only require notification to, and concurrent review by the Authority's Executive Director. The purpose of this requirement is to ensure that the Authority has the required information to evaluate programming strategy and the performance of CIP projects in the context of the entire universe of programming and project delivery decisions in San Francisco. Administrative level CIP Amendments may involve any of the following funding sources:

Federal: TEA

State: TCI and SHOPP

Regional: Measure 1 and AB 664, STA, TDA, AB 434

Local: SFMRIC, TIDF, AB 434

In addition, proposed changes to Prop. B programming will automatically trigger administrative-level review and, at the Executive Director's discretion, may require policy level CIP Amendments.

7.2.3. Sources not Covered By CIP Amendments

Certain funding sources, such as SLPP, are programmed through state or regional processes. Typically, the funds become available to City project sponsors through a separate application procedure. In some cases, the funds are allocated on a first-come, first-served basis, so that the ability of City departments to act quickly is crucial. For funding sources in this category (listed below), which are not subject to a local programming action, there is still a need to include the data in the Authority's database, but no CIP amendments are required. Project sponsors are required to submit to the Authority a copy of the grant application request at the same time as the application is made to the funding agency. Project sponsors are also required to submit to the Authority a copy of the grant award letter, as soon as it is received.

Funds subject to this requirement include at least the following:

State: Gas Tax, HES, HBRR, SLPP, and TEE.

7.3. Requirements for Submittal of CIP Amendment Requests

7.3.1. Application Contents - Format

In order to avoid additional reporting burdens on City departments, the is no specific form or format for submittals to the Authority. However, project sponsors wishing to make application to regional, state or federal programming agencies for changes affecting current CIP programming, or sponsors who are planning to submit initial applications for new programming to regional, state, or federal agencies, must submit two (2) copies of those preliminary applications to the Authority, for review prior to filing there applications with those programming agencies.

The Authority's intent is not to question the priorities of City departments, or to suggest different projects (particularly regarding applications for new programming), but rather to evaluate their programming requests for impacts on multimodal system performance and for impacts on Proposition B and overall CIP strategy.

7.4. The Authority's Review Process

The sections below detail the Authority's process, which includes an initial administrative level review, to determine the need for further application information as well as to suggest the appropriate level of CMP Amendment required. This is followed by detailed, concurrent reviews for programming and performance implications. The process also calls for discussions with project sponsors to resolve any issues identified by the Authority's review, and establishes basic procedures to ensure disposition of the requests for review within a reasonable period of time.

7.4.1. Application In-take Review

Upon receipt of an application for programming changes, the Authority will perform an initial staff-level review. Within ten (10) working days after receipt of the application, the Authority will communicate in writing to the applicant the need for any additional information, necessary in order to further process the application.

Within (10) working days after receipt of all information necessary to complete the application, the Authority will issue a *letter of initial findings*, notifying the applicant in writing about the level of CIP Amendment required.

If the Authority finds that a policy-level CIP Amendment will be required (involving Authority Board action), the communication will include:

- a schedule for Authority Board approval
- a preliminary list of unresolved conformance or consistency issues identified in connection with the application; and
- a proposed cause of action for resolution of these issues, including, at least, consultation and joint efforts with the applicant

7.4.2. Detailed Review

Unless otherwise specified in the proposed schedule for resolution of issues, within ten (10) working days after issuance of the letter of initial findings, the Authority will complete a detailed review of the application. The detailed review will include two components:

a programming review, and a performance review. To expedite the process, both reviews will be carried out concurrently at the Authority. The conclusions from the detailed review will form the basis for an administrative finding of concurrence or for a recommendation to the Authority Board, as appropriate.

A. Programming Review

The programming review will be performed jointly by the office of the Director of Plans and Programs and the office of the Director of Congestion Management, to evaluate issues of Proposition B Strategic Plan consistency and CMP CIP conformance.

Programming Review Criteria

The evaluation of impacts of proposed programming changes on the CIP (including the Prop. B program) is structured to provide information about three key strategic programming and fiscal policy factors for the Authority:

a) **Cost of Money.** The analysis will address questions such as: does the proposed change affect cash flow? does it limit availability of funding by Prop. B category or by state or federal funding source? does it require or bring the Authority closer to the need to bond in order to deliver the Prop. B program? does it otherwise affect other CIP funding sources so as to increase the cost of money?

b) **Leveraging Capacity.** The analysis will address questions such as: does the proposed programming change improve or worsen the Authority's prospective ability to capture state and federal funds for San Francisco projects?, does it increase the local (Prop. B or other) match?

c) **Other Programming Policy Consistency.** The analysis will address questions such as: does the proposed programming change result in a skew of the funding category targets established in the Prop. B Strategic Plan? does it substantially alter the programming priorities established in the Strategic Plan? does it substantially alter the programming priorities established in the latest CMP CIP?

B. Performance Review

The performance review will be conducted by the office of the Director of Congestion Management, to evaluate impacts on the performance of San Francisco's multimodal transportation system.

Performance Review Criteria

The evaluation of potential impacts of proposed programming changes on multimodal system performance will be performed according to the criteria described below. These analyses are intended to provide order-of-magnitude findings about future system performance, particularly cumulative impacts on operating conditions at the facility, corridor, or systemwide level. The process is not focused on prediction of minor changes in individual CMP network segments. As required by state law, the Authority's Transportation Analysis Database (TAD), when completed will support these analyses. The TAD will be improved incrementally over time and complemented with information from city departments and other available sources. For a more detailed discussion of multimodal system performance, please refer to Chapter 5.

a) **Effects of Schedule Changes on Performance.** The analysis will address questions such as: Does the proposed programming change involve or result in a delay in the delivery (completion) of any CIP projects? are there significant anticipated impacts on system performance because of completion delays?

b) **Effects of Scope Changes on Performance.** The analysis will address questions such as: does the proposed programming change result in a downsizing of CIP projects?

c) **Potential Deficiencies.** The analysis will address questions such as: does the proposed programming change create the potential for a deficiency on the CMP network? does it adversely affect the City's ability to implement already adopted deficiency plans? does it adversely affect the likely effectiveness or delivery timelines for an already adopted deficiency plan?

d) **Multimodal Balance.** The analysis will address questions such as: does the proposed programming change affect the multimodal balance of the CIP? does it significantly degrade performance conditions for one mode vis-a-vis other modes? is it likely to significantly affect certain categories of travelers vs. others (e.g., will it adversely affect off-peak transit riders vs. drivers?, or local vs. through trips?)

e) **Subarea Impacts.** The analysis will address questions such as: is the proposed programming change likely to result in disproportionate adverse impacts to system performance for one subarea of the city vs. the others?

7.4.3. Disposition of Amendment Requests

For Administrative-Level Amendments
If the outstanding issues identified during the review process are resolved, the Authority will issue a *letter of concurrence* with the proposed programming change. If there is no resolution within 30 days of the issuance of the *letter of initial findings*, the request will be scheduled for Authority Board consideration at the next meeting.

For Policy-Level Amendments
If there are no outstanding issues identified during the review process, the item will be scheduled for Authority Board action at the next meeting, with a recommendation for approval. If the review process identifies issues, and they are not resolved within the time frame specified in the Authority's *letter of initial findings*, the Authority will establish a schedule for final resolution of these issues, and invite the pertinent programming agencies to facilitate the process. The findings and recommendations from this process will be agendized for Authority Board action on a schedule determined by the Executive Director.

7.5. Adjustments to Prop. B Strategic Plan

As part of the evaluation process for all CIP Amendments, the Authority will explicitly consider and recommend adjustments to the Prop. B Strategic Plan and to the AB 434 program, to maintain consistency. Such adjustments will be scheduled for Authority Board action together with the corresponding CIP Amendments.

7.6. Notification of Programming Agencies

The Authority will notify the pertinent regional, state, or federal agencies, in writing, within 5 working days of Authority Board action on policy level CIP Amendments, and/or staff-level approval of Administrative-Level CIP Amendments.

SECTIONS UNDER DEVELOPMENT

8. CIP Project Lists

9. Program Overview

TABLE 8-A

1993 TIP

STP/CMAQ/FCR

SAN FRANCISCO PROGRAMMED FUNDS

All costs in $1000s

SPONSOR	PROJECT	PASS SCREEN?	TOTAL COST	ISTEA COST	TSM MATCH	OTHER/ LOCAL MATCH	YEAR (ESC)	PS&E DATE	PROJECT TYPE	PROGRAM
CMA	ISETA Planning & Programming Activities	Y	$431.60	$382.00	$0.00	$49.60	1992	Sep-92	PLAN	STP
DPT	Bayshore Blvd/101 Offramp	Y	$250.00	$200.00	$0.00	$50.00	1992	Jun-93	IC	STP GUAR
DPT	Army St. widening	Y	$600.00	$500.00	$0.00	$100.00	1992	Jul-93	ART	STP GUAR
DPT	New Signal: Alemany/Mt. Vernon	Y	$110.00	$80.00	$12.70	$17.40	1992	Jan-93	SIGN	STP
DPT	New Signal: Clay/Powell	Y	$100.00	$80.00	$11.50	$8.50	1992	Jan-93	SIGN	STP
DPT	New Signal: West Portal/Vicente	Y	$80.00	$64.00	$9.20	$6.80	1992	Jan-93	SIGN	STP
DPT	New Signal: Divisadero/Page	Y	$144.00	$120.00	$16.60	$7.40	1992	Oct-92	TOS	STP
DPT	Traffic Video Surveillance Demo	Y	$100.00	$64.00	$0.00	$36.00	1992	Jan-93	SIGN	CNAQ
DPW	Street Resurfacing Program	Y	$6,781.00	$2,600.00	$0.00	$4,181.00	1992	Jul-92	PAVE	STP GUAR
DPW	Curp ramps/cuts	Y	$1,300.00	$1,000.00	$149.50	$150.50	1992	Jul-92	PED	STP
MUNI	Metro Turnback	Y	$211,758.00	$3,400.00	$0.00	$208,358.00	1992	Dec-93	TRAN	STP GUAR
MUNI	Metro Turnback	Y	$211,758.00	$5,400.00	$0.00	$206,358.00	1992	Dec-93	TRAN	CMAQ
MUNI/PORT	Metro East/Illinois Street Bridge (1)	Y	$87,198.80	$13,300.00	$1,728.20	$72,170.60	1992	Apr-94	TRAN	STP
	TOTAL SAN FRANCISCO		$520,611.40	$27,190.00	$1,927.70	$491,493.80				

NOTES: (1): ISTEA funding for this project was reprogrammed to other MUNI projects. See Tables 8-D and 8-E for details.

Source: 1991 TIP - Metropolitan Transportation Commission

Table 8-B

1995 TIP

STP/CMAQ/FCR

1993 SAN FRANCISCO PROGRAMMING REQUESTS

PROJECT CATEGORY/NAME	TYPE	SPONSOR	Request in $,000(1)	PROPOSED FUNDING STPG (2)	STP (3)	CMAQ (4)	FCR (5)	TOTAL
Trolley coach replacement	Transit	MUNI	$4,800	$0	$4,800	$0	$0	$4,800
Replacement LRVs	Transit	MUNI	$23,150	$0	$3,271	$4,514	$0	$7,785
Doyle Drive reconstruction (ROW)	Roadway/Ped	CalTrans	$3,000	$0	$1,830	$0	$0	$1,830
A&B rail car rehabilitation	Transit	BART	$76,518	$0	$0	$4,500	$0	$4,500
Downtown sidewalk widening	Roadway/Ped	DPW	$1,357	$0	$1,357	$0	$0	$1,357
Track replacement	Transit	MUNI	$1,770	$0	$1,770	$0	$0	$1,770
Bus stop improvements	Transit	MUNI	$836	$0	$0	$836	$0	$836
Valencia St. bikeway	Traffic/Bikeway	DPT	$330	$0	$0	$0	$0	$0
ETV signal pre-emption	Transit	MUNI	$1,181	$0	$426	$755	$0	$1,181
Motor coach signal pre-emption	Transit	MUNI	$478	$0	$0	$478	$0	$478
Transfer point improv (Phase I)	Transit	GGT	$300	$0	$55	$0	$0	$55
Lincoln Way signal interconnect	Traffic/Bikeway	DPT	$350	$0	$0	$350	$0	$350
Emergency vehicle signal preempt	Traffic/Bikeway	DPT	$3,712	$0	$0	$1,000	$0	$1,000
Trolley overhead rehab	Transit	MUNI	$1,416	$458	$418	$540	$0	$1,416
Key ADA Stations	Transit	MUNI	$2,610	$0	$2,610	$0	$0	$2,610
Translink	Transit	GGT	$3,600	$0	$0	$216	$0	$216
Caltrain locomotive rebuild (prototype)	Transit	JPB	$320	$0	$35	$0	$0	$35
Railcar rehabilitation	Transit	JPB	$435	$0	$45	$0	$0	$45
TOS/101 County line to I-280)	Traffic/Bikeway	CalTrans	$465	$0	$0	$465	$0	$465
TOS/280 (County line to 101)	Traffic/Bikeway	CalTrans	$640	$0	$0	$640	$0	$640
Sidewalk improvements	Roadway/Ped	DPW	$1,150	$0	$373	$0	$0	$373
Ferry terminal upgrade, Phase III	Transit	Port	$5,775	$0	$0	$0	$0	$0
LRV boarding islands	Transit	MUNI	$2,285	$0	$0	$0	$0	$0
Gauntlet track/tunnels 3&4	Transit	Port	$1,179	$1,179	$0	$0	$0	$1,179
Curb ramp reconstruction	Roadway/Ped	DPW	$5,200	$1,317	$0	$0	$0	$1,317
Bayshore Blvd./101 weaving ramp	Traffic/Bikeway	DPT	$700	$700	$0	$0	$0	$700
Key station ADA improvements	Transit	JPB	$5,080	$550	$0	$0	$0	$550
Lake Merced bikeway	Traffic/Bikeway	DPT	$370	$370	$0	$0	$0	$370
Downtown pedestrian alleys	Roadway/Ped	DPW	$267	$267	$0	$0	$0	$267
Street resurfacing	Roadway/Ped	DPW	$8,000	$4,000	$0	$0	$0	$4,000
10 expansion buses	Transit	GGT	$3,533	$0	$0	$0	$0	$0
Monterey Blvd. reconstruct	Traffic/Bikeway	DPT	$140	$140	$0	$0	$0	$140
Automated scheduling/ops. system	Transit	GGT	$353	$20	$0	$0	$0	$20
Bus stop improvements	Transit	GGT	$200	$0	$0	$0	$0	$0
		TOTAL	$161,500	$9,001	$16,990	$14,294	$0	$40,285
								$40,285

(1) Figures only reflect the amounts requested from STP/CMAQ and FCR. Total project cost may be higher.

(2) Zero FCR funds statewide are the result of a CTC decision.

(3) BART A/B Car funds subject to MTC support and BART provision of local share.

Table 8-C

1994 STIP

SAN FRANCISCO UNALLOCATED PROJECTS

Project Name	Sponsor	STIP Number	Year of Programming	Programmed Amount
Mid Embarcadero	DPW	EMBMID	98/99	$7,000,000
Escalators/Elevators	MUNI	0928	96/97	$500,000
LRV Purchase	MUNI	0933B	96/97	$23,700,000
Cesar Chavez St. Widening	DPT	SFARMY	95/96	$1,130,000
LRV Purchase	MUNI	R049SA	98/99	$35,302,000
Track Improvements	MUNI	0927	96/97	$423,000
LRV Purchase	MUNI	R049SA	98/99	$3,980,000
Mid Embarcadero	DPW	EMBMID	98/99	$8,000,000
				$80,035,000

This list includes 1994 STIP projects that have not yet received allocations from the California Transportation Commission, and are therefore still subject to reprogramming in the 1996 STIP.

CHAPTER 9

DEFICIENCY PLANS

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Overview**
- **Deficiency Planning Process**
- **Special Issues**
- **Work Program Items -Key Milestones**

1. Legislative Requirements

The provision for deficiency plans is intended to work in conjunction with the requirement for annual monitoring of levels of service (LOS) on the designated CMP roadway network. In order to make its annual finding of conformance with the CMP, the Congestion Management Agency (CMA) must first ascertain that the LOS standard is not being violated. If, however, the results of monitoring on a CMP roadway segment show that LOS has fallen below the established standard, the CMA can still make a finding of conformance with the CMP if the local jurisdiction designates the roadway segment as deficient and develops a deficiency plan for it.

California Government Code section 65098.4(a) states that *"A local jurisdiction shall prepare a deficiency plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The deficiency plan shall be adopted by the city or county at a noticed public hearing."* According to section 65089.4(c), deficiency plans must contain the following components: 1) an analysis of the causes of the deficiency, 2) a list of improvements that would have to be made to prevent the deficiency from occurring, including cost estimates, 3) a list of improvements proposed as part of the deficiency plan, and finally 4) an action plan for implementation of the improvements identified as part of the deficiency plan, including an implementation schedule. The improvements proposed must be drawn from an inventory of acceptable actions compiled by the air quality management district. The deficiency plan must "measurably improve" the overall LOS on the designated CMP roadway network, and "contribute to significant improvements in air quality". The statutes also require that the city or county forward the deficiency plan to the Congestion Management Agency, which must hold a public hearing within 60 days of receipt of the deficiency plan, and either accept or reject it, but not modify it. Rejection of a deficiency plan by the Congestion Management Agency will result in a finding of non-conformance with the CMP.

The preparation and review of deficiency plans should not be confused with the separate and independent City processes for review and approval f public or private development projects. It is not the purpose of these guidelines to amend, modify or change the independent requirements of City ordinances or the California Environmental Act (CEQA). However, the deficiency plan process should take advantage of any past CEQA analysis and avoid duplicating these past efforts if the analysis is still valid. Nevertheless, the assumptions incorporated into past EIRs and TIAs, while reasonable at that time, may not be valid at the time of preparation of the deficiency plan.

2. Legislative Intent and Application to San Francisco

This section provides background information on deficiency plans and their applicability to San Francisco. For an overview of the Deficiency Plan development process, please see section 3.0. For a detailed discussion of the individual steps in the Deficiency Plan development process, please see section 4.0.

2.1 Deficiency Plans: What They Are

In 1990, the California voters approved Proposition 111; thus adding nine cents in additional tax to each gallon of gasoline sold in the state. The money was to be used to improve transportation throughout California. The year prior to Proposition 111's approval, the State Legislature approved AB 471 (Katz), the original CMP legislation[1]. AB 471 required all local jurisdictions to maintain the adopted LOS standard on all CMP roadways or risk losing their Proposition 111 gas tax revenues. The Legislature then revised the original legislation (through AB 1791 - Katz) to allow jurisdictions to continue to receive their share of Proposition 111 gas tax moneys when the level of service (LOS) on a CMP road segment or intersection falls below LOS "E" provided local jurisdictions prepared deficiency plans for those segments. The latest legislative revisions to the CMP statutes (AB 1963) include the following changes:

- Deficiency plans must be completed within one year of the CMAs official notice of a deficiency.
- The definition of exempt trips have been expanded from inter-regional travel to include trips caused by construction, rehabilitation, or maintenance, impact of freeway ramp metering, traffic signal coordination, low-income housing, and traffic generated by high-density residential or mixed-use development located within a quarter mile of a fixed passenger rail station.
- If a CMA Board adopts a Finding of Non-Conformance, the Board notifies the State Controller who must hold the jurisdiction's Proposition 111 gas tax money in escrow for 12 months, at which point the money is transferred to the CMA.

The intent of deficiency plans, therefore, is to allow development to continue while at the same time forcing local jurisdictions to offset the congestion it causes. The law, however, does not specify how effective local jurisdictions' efforts must be and, after five years of living with the law, the collective experience across the state does not point to what level of effort is acceptable.
The deficiency plan legislation offers local jurisdictions two alternatives:

1) Either eliminate the problem (correct the deficiency where it manifests itself. This is known as *direct mitigation*; or

2) Implement other actions that improve the overall performance of the CMP network, even if the actions do not directly improve the original deficiency. These are known as *offsetting actions.*

Offsetting actions, as opposed to direct mitigation, include capital improvements, transportation programs, services, or other activities that improve the countywide level of service. Direct mitigation involves removing the deficiency such that the LOS is improved above LOS F. A deficiency plan may include both mitigating and offsetting actions. While the preparer of a deficiency plan may try to mitigate the deficiency directly, the technically appropriate mitigation may have prohibitive costs, regulatory obstacles, or overwhelming environmental consequences. Offsetting actions provide alternative compensations that may leave the facility no less deficient, but provide improvements in other part of the system.

Note that the questions are asked after a deficiency has been detected (since under state law, deficiency plans cannot be required for predicted, future deficiencies). Thus, deficiency plans are *reactive* solutions applied after the problems exist. In other works, they impose marginal offsetting action but do not directly prevent the problem. Nevertheless, the existence of rigorous deficiency plan procedures can help pre-empt deficiencies by reminding the proponents of land use changes or transportation projects to anticipate their project's future impacts on the CMP network and incorporate remedies to mitigate prospective impacts. Deficiency plan requirements, for example, may help toughen a project's EIR mitigation measures or moderate the exemptions justified in a Statement of Overriding Consideration.

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[1] The 1989 CMP legislation was part of the AB 471 legislation known as the Katz-Kopp-Baker-Campbell Transportation Blueprint for the 21st Century. Voter approval of Proposition 111 on June 5, 1990 effectively enacted the CMP legislation into law.

It is important to recognize that while environmental analysis conducted pursuant to CEQA may provide information useful in the preparation of deficiency plans, these plans serve a separate and distinct purpose. It is not the intent of these guidelines to create additional review processes for individual development or public construction projects.

2.2 Applicability to San Francisco and Relationship to Other Analyses

The San Francisco Planning Department requires project sponsors to prepare Transportation Impact Analyses (TIAs) for activities that have the possibility of creating significant transportation impacts. The TIA guidelines spell out procedures that provide a significant measure of the analysis and documentation that would be required as part of a Deficiency Plan. In addition, any project or activity required to prepare an EIR must also address many of the requirements of a deficiency plan. Nevertheless, these procedures do not obviate the need for deficiency plan procedures in San Francisco for the following reasons:

- A TIA *forecasts* the severity of a project's expected impacts on facilities, while a deficiency plan *implements* actions to mitigate -- or offset -- problems already detected (i.e., deficiencies *actually measured* on a facility).
- A TIA or EIR considers the cumulative impacts on a transportation facility of a proposed project in combination with other foreseeable similar projects. The deficiency plan, because its focus is on a facility rather than an individual project, considers multiple causes of the deficiency.
- CEQA findings approving a development project frequently include a Statement of Overriding Considerations, accepting large transportation impacts in exchange for other benefits.
- A TIA or EIR is prepared prior to project implementation, *attempting* to analyze and mitigate a project's potential negative impacts. If the project causes a deficiency, the Authority must conclude that (1) the TIA or CEQA analysis was flawed, (2) mitigation measures were not able to be implemented, or (3) it is not possible to impose mitigation on private developers without unacceptably constraining economic growth and/or it is not financially feasible for the City to implement mitigation. Deficiency plans, therefore, take over where TIAs leave off. Conversely, TIAs may identify and address transportation impacts for projects which are statutorily excluded from deficiency plan analysis.

The intent, however, is to structure a Deficiency Plan process that takes maximum advantage of the analysis procedures and data resources already in place and minimize the need for additional analysis requirements.

2.3 CMP Multimodal Network & Performance Monitoring

The CMP system consists of three subsystems: roadways, transit and bicycle/pedestrian. The monitoring program measures level of service on the roadways and intersections. According to the State legislation [Government Code § 65089.3 (b)(1)(A)], deficiencies are detected only on the roadway system. Nevertheless, deficiency plans must take into consideration, and in fact depend on, the transit and bicycle/pedestrian systems to offset LOS deficiencies on the roads and intersections. The CMP road network is defined in Chapter 3 of the 1995 CMP. The other component of the CMP system are addressed in Chapter 5: Performance Element.

3.0 Overview

This brief overview is intended as accompanying text to the flow charts in Exhibits 1,2, and 3. The sections that follow this overview provide further detail on each step shown in the flow charts. The charts use three types of symbols:

- an oval indicates information, data, or other types of inputs needed by the City (i.e., a department or the Mayor's Office) or the Authority to take action or make a decision.
- a rectangular box indicates an action taken by the Authority, the Mayor's Office, the lead department, or other city departments.
- a diamond indicates a decision made by either the Authority staff or the Authority Board. Unless explicitly stated as the "Authority Board", the word "Authority" always connotes Authority staff.

The flow chart consists of three, sequential exhibits representing the Deficiency Plan process from the moment where the deficiency is detected all the way through the point when the Authority Board accepts or rejects the deficiency plan.

Exhibit 1. Deficiency Detection and City Notification

The box and four connecting ovals at the top of Exhibit 1 show that the Authority monitors the CMP roadway network and detects a potential deficiency when the level of service (LOS) on any non-exempted segment of the CMP roadway network goes to LOS F. Exempted segments are those that were found at LOS F during the first monitoring cycle in 1991 (see Chapter 4 of 1995 CMP). The dotted oval indicates that the Authority may provide the City with advanced warning of potential future deficiencies by incorporating the results of studies by other departments such as transportation impact analyses (TIAs) or environmental impact reports (EIRs). The Authority is required by law only to detect and notify the City of a current deficiency.

Once the Authority detects a deficiency, it must determine if the deficiency has been caused by external causes, exempt causes, or temporary causes. If subsequent investigation and modeling reveals the deficiency is real, the Authority Board adopts a finding of "Deficiency" and notifies the City (Mayor's Office). This notification includes information on the nature and cause of the deficiency.

In the box at the bottom of Exhibit 1, the Mayor's Office assigns a city department to act as the lead department for the preparation of a deficiency plan. At this point, the deficiency detection and notification stage is complete and the process continues as shown in Exhibit 2.

Exhibit 2. Deficiency Analysis and Mitigation Plan Preparation

State law requires that a Deficiency plan first analyze and determine what it would take to correct the problem through direct action on the roadway found to be deficient. This direct action is called a Mitigation Plan (shown as the three boxes inside the dotted line). The Mitigation Plan usually involves adding sufficient capacity to the roadway to allow traffic to flow at LOS "E" or better. The Mitigation Plan must include any and all programmed improvements (as shown by the three ovals).

The lead department then submits the mitigation plan, including its own determination as to the plan's feasibility. The Authority evaluates the Mitigation Plan and either accepts or rejects the lead department's finding. If the lead department finds it can mitigate the deficiency, it must prepare an implementation plan for its proposed Mitigation Plan. If the lead department finds it cannot mitigate the deficiency and the Authority concurs, the lead department proceeds with the preparation of a Deficiency Plan (presented on Exhibit 3).

The Authority's evaluation of the lead agencies findings will involve its own feasibility criteria, consultations with the departments that would be called upon to implement the Mitigation Plan, and the effects of CIP projects and other capital investment on the deficient segment. The feasibility criteria include financial feasibility, environmental compatibility, and consistency with the City's transportation planning priorities and policies. In addition, the Authority considers the ability of other departments to help mitigate the deficiency and the likelihood that CIP projects or other programmed improvements will eventually and significantly improve the deficient segment.

If the lead department finds that the package of mitigation measures is feasible, it must prepare an implementation plan. The Authority may either accept or reject the Implementation Plan for the Mitigation Plan. If rejected, the lead department must prepare an alternative. If accepted, the Authority modifies the CIP or other transportation programming documents to conform with the Mitigation Plan improvements. All departments called upon to implement portions of the Mitigation Plan must enter into an inter-agency agreement stating each department's responsibility and funding sources.

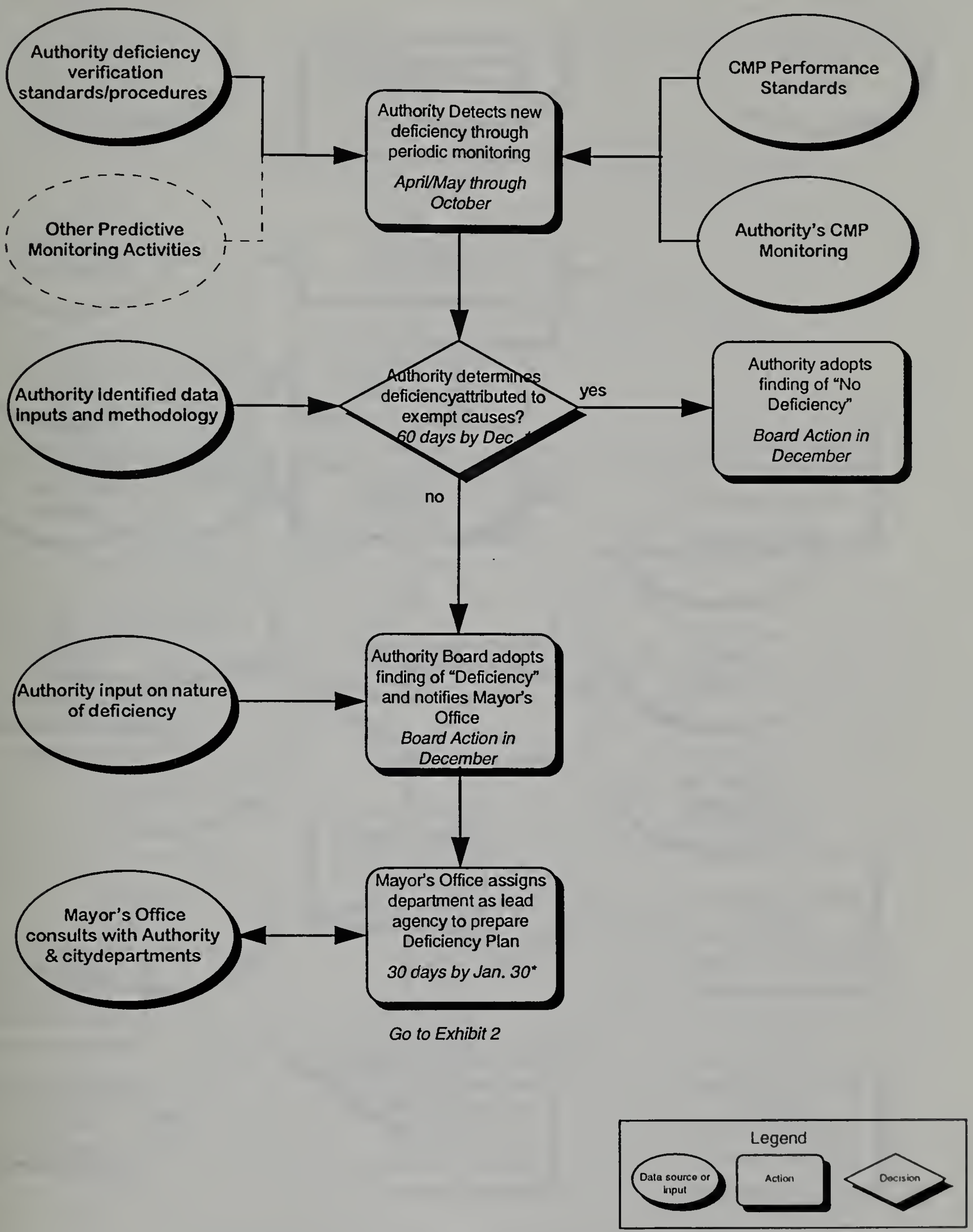
Exhibit 3. Deficiency Plan Evaluation and Approval

The preparation of a deficiency plan involves two basic steps: 1) the compilation of a list of deficiency plans actions and the subsequent preparation of an Implementation Plan. In the first step, the lead department should include actions that will bear directly on the deficient road segment, actions that will improve system-wide LOS (as measured by the multimodal performance measures), and the actions listed by the BAAQMD.

The Authority either rejects or accepts the lead department's proposed list of Deficiency Plan actions. If accepted, the lead department prepares an Implementation Plan and submits this plan for the Authority's approval. If the Authority rejects the action list, the lead department must prepare an alternative action list for the Authority's review.

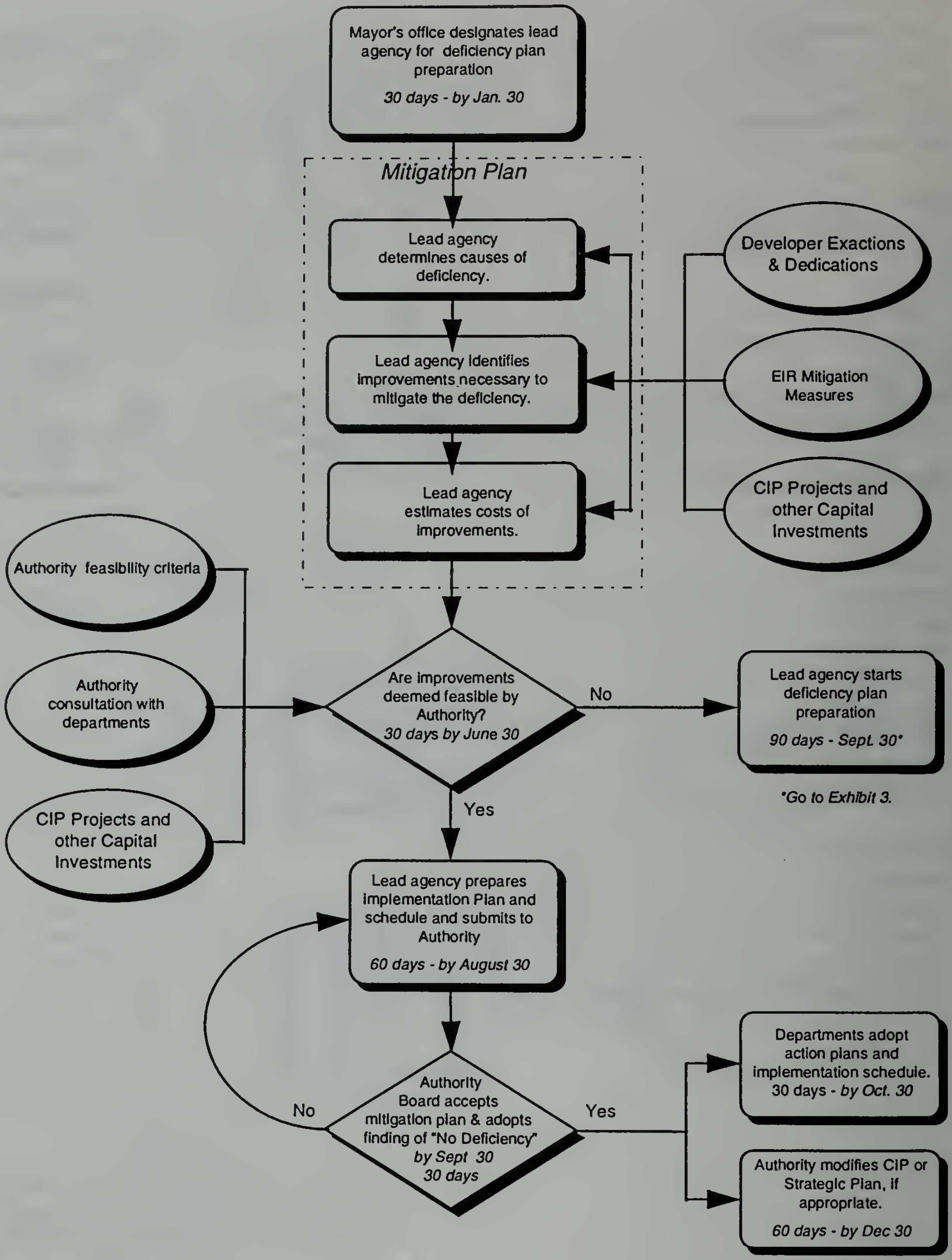
The Authority uses similar adequacy criteria as described in its evaluation of the Mitigation Plan (Exhibit 2). If the Authority accepts the Implementation Plan, the Authority Board will hold a noticed public meeting and adopt a Finding of Conformance. If, however, the Authority and the lead department are unable to agree on a implementation plan, the lead department may either try again, or submit its Final Deficiency Plan (including its implementation plan) to the Authority Board for Board action. If the Authority Board issues a Finding of Non-Conformance, the Authority must notify the State Controller to withhold funds. The funds are held in escrow for 12 months and then turned over to the Authority (as the City's CMA).

Exhibit 1. Defiency Detection and City Notification


Authority deficiency verification standards/procedures
Other Predictive Monitoring Activities
Authority Detects new deficiency through periodic monitoring
April/May through October
CMP Performance Standards
Authority's CMP Monitoring
Authority Identified data inputs and methodology
Authority determines deficiencyattributed to exempt causes?
60 days by Dec.
yes
no
Authority adopts finding of "No Deficiency"
Board Action in December
Authority input on nature of deficiency
Authority Board adopts finding of "Deficiency" and notifies Mayor's Office
Board Action in December
Mayor's Office consults with Authority & citydepartments
Mayor's Office assigns department as lead agency to prepare Deficiency Plan
30 days by Jan. 30*
Go to Exhibit 2
Legend
Data source or input
Action
Decision

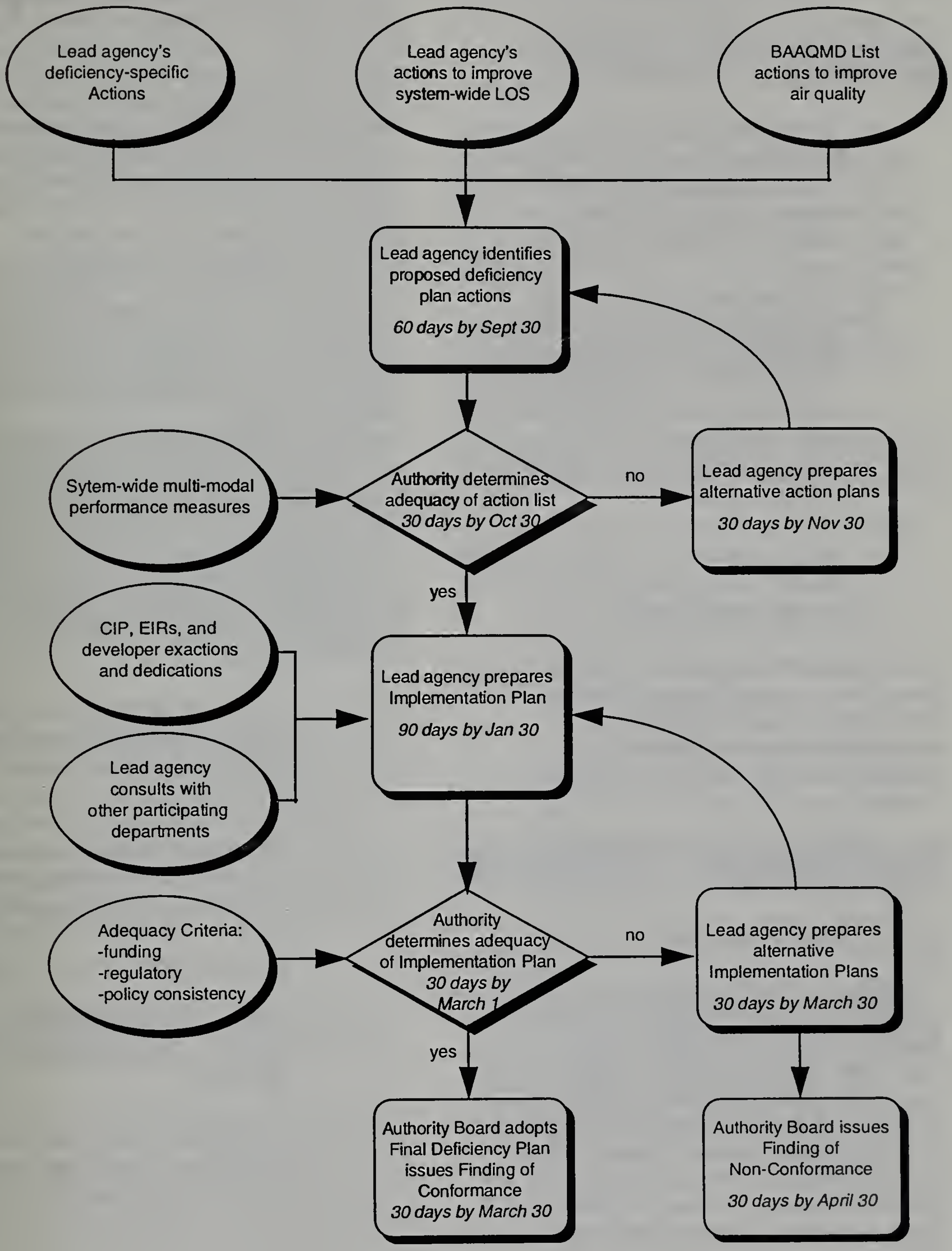
NOTES:
1. Read "lead department" instead of "lead agency"
2. Final exhibits in preparation - Will be available with the final document in November.

Exhibit 2. Defiency Analysis and Mitigation Plan Preparatio


Mayor's office designates lead agency for deficiency plan preparation
30 days - by Jan. 30
Mitigation Plan
Lead agency determines causes of deficiency.
Lead agency identifies improvements necessary to mitigate the deficiency.
Lead agency estimates costs of improvements.
Developer Exactions & Dedications
EIR Mitigation Measures
CIP Projects and other Capital Investments
Authority feasibility criteria
Authority consultation with departments
CIP Projects and other Capital Investments
Are improvements deemed feasible by Authority?
30 days by June 30
No
Lead agency starts deficiency plan preparation
90 days - Sept. 30*
*Go to Exhibit 3.
Yes
Lead agency prepares implementation Plan and schedule and submits to Authority
60 days - by August 30
No
Authority Board accepts mitigation plan & adopts finding of "No Deficiency" by Sept 30
30 days
Yes
Departments adopt action plans and implementation schedule.
30 days - by Oct. 30
Authority modifies CIP or Strategic Plan, if appropriate.
60 days - by Dec 30

NOTES:
1. Read "lead department" instead of "lead agency"
2. Final exhibits in preparation - Will be available with the final document in November.

Exhibit 3. Defiency Plan Evaluation and Approval


Lead agency's deficiency-specific Actions
Lead agency's actions to improve system-wide LOS
BAAQMD List actions to improve air quality
Lead agency identifies proposed deficiency plan actions
60 days by Sept 30
Sytem-wide multi-modal performance measures
Authority determines adequacy of action list
30 days by Oct 30
no
Lead agency prepares alternative action plans
30 days by Nov 30
yes
CIP, EIRs, and developer exactions and dedications
Lead agency consults with other participating departments
Lead agency prepares Implementation Plan
90 days by Jan 30
Adequacy Criteria:
-funding
-regulatory
-policy consistency
Authority determines adequacy of Implementation Plan
30 days by March 1
no
Lead agency prepares alternative Implementation Plans
30 days by March 30
yes
Authority Board adopts Final Deficiency Plan issues Finding of Conformance
30 days by March 30
Authority Board issues Finding of Non-Conformance
30 days by April 30

NOTES: Same as Exhibit 2.

4.0 Deficiency Planning Process

The following sections describe the methodology to be followed in preparing Deficiency Plans. They address:

a) The detection and determination of the deficiency and the designation of a city department as the lead department that will develop a Deficiency Plan (Section 4.1).

b) The preparation of the actual Deficiency Plan, beginning with the development of a Mitigation Plan that proposes roadway improvements to remove the deficiency and estimates their cost, then proceeds with the development of a list of offsetting actions (Section 4.2).

c) The preparation of an implementation plan for actions recommended in the Deficiency Plan (Section 4.3).

This process is designed to capitalize on the strengths and capabilities of each city department or agency in terms of transportation impact analysis, LOS monitoring, or enforcement of mitigation measures.

4.1 Deficiency Detection & Designation of Lead Department

4.1.1 Deficiency Detection

The Authority will continue to conduct floating cars runs as part of its periodic monitoring of the CMP roadway network. Chapter 4 of the 1995 CMP provides detailed background on monitoring procedures. While this monitoring program will detect deficiencies once they have occurred, it will not forecast future traffic conditions or the location of potential future deficiencies. Please see Section 5.3 for a discussion of future deficiency detection.

Determination of Causes

Upon detection of a deficiency, the Authority will consult with MTC to determine if external trips or pass through trips may have caused the deficiency. It will also review all relevant CEQA traffic analysis and/or TIAs of recently completed projects. It will then use the Travel Analysis Database (TAD), sketch planning techniques and other means to isolate and examine the cause(s) in more detail. See Chapter 4 of the 1995 CMP for more detail on deficiencies through LOS monitoring.

Following the detection of a deficiency through the monitoring of LOS on the CMP roadway network, the Authority completes an investigation to determine if any trips are exempt and if the deficiency still exists after removing the exempt trips from the deficient roadway segment.

The State legislation requiring deficiency plans has specifically exempted the trips generated by specific activities [Government Code § 65089.4.(f)]. Thus, a deficiency that results because of a exempt activity will have the exempt trips deducted and be re-evaluated to verify whether the roadway segment in question has a deficiency. The exempt activities include:

- Inter-regional travel (i.e., pass through trips which have neither origin or destination in San Francisco);
- Construction, rehabilitation, or maintenance of facilities that impact the CMP roadway network;
- Impact of freeway ramp metering;
- Traffic signal coordination by the state or multi-jurisdictional agencies;
- Traffic generated by the provision of low-income and very low-income housing; and

- Traffic generated by high-density residential or mixed-use development located within a quarter mile of a fixed passenger rail station.[2]

If the exempt trips are deducted and the deficiency still exists (i.e., the LOS on the segment in question has not improved to at least LOS "E"), a deficiency plan must be prepared.

Findings of Deficiency Notification of & Mayor's Office

If, after subtracting the allowed exemptions (see Section 4.1.3), the LOS on the roadway segment in question has not improved to at least LOS "E" (calculated according to procedures detailed in Chapter 4), the Authority Board will adopt a Finding of Deficiency and notify the Mayor's Office of the need for preparation of a Deficiency Plan. The Authority may, as part of this notification, provide an assessment of the potential causes of the deficiency to aid the Mayor's Office in designation of a city department as a lead department for the preparation of the Deficiency Plan.

The Authority may recommend to the Mayor's Office that the lead department consider future (predicted) deficiencies in preparing its deficiency plan. Deficiency Plans that apply to future as well as current deficiencies may result in synergies, offsetting deficiencies with fewer actions than would be necessary if separate deficiency plans were prepared sequentially. See Section 5.3 for further details.

State law does not require deficiency plans to consider future deficiencies. The decision to include future deficiencies in a deficiency plan is at the discretion of the Mayor's Office. The Authority will help coordinate information to facilitate this pro-active approach to deficiency plan preparation.

4.1.2 Lead Department Designation

Upon notification of a deficiency by the Authority, the Mayor's Office will designate a city department as lead department for the preparation of a deficiency plan. As the lead department, the designated department may request the involvement of other departments, especially where design, implementation, or funding of likely offsetting actions are not within the jurisdiction of the lead department. The Authority will be available to consult with the Mayor's Office.

4.2 Deficiency Plan Preparation and Approval

The preparation of a deficiency plan involves six basic steps:

1) The lead department prepares a Mitigation Plan which includes: a) a description of the causes of the deficiency; b) a list of all improvements necessary to fully mitigate the problem on the deficient roadway itself; and c) an estimate of the cost and available funding for those improvements. The lead department includes a statement as to the feasibility of the Mitigation Plan (Section 4.2.1).

2) The Authority evaluates the feasibility of the Mitigation Plan and accepts or rejects the lead department's findings (Section 4.2.2). If the lead department proposes a feasible Mitigation Plan, it skips to Step 5. If the Authority accepts that the Mitigation Plan is not feasible, then:

3) The lead department prepares a Deficiency Plan Action List (Section 4.2.3).

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[2] "High density residential development" means a minimum of 24 dwelling units per acre and equal to 120 percent of the maximum density allowed under the local general plan and zoning ordinance, or a minimum density of 75 dwelling units per acre. "Mixed use development" must have more than one half the land area or floor area used for high density housing.

4) The Authority reviews the Action List and accepts or rejects it (Section 4.2.4).

5) The Lead Department prepares an Implementation Plan, identifying responsible departments, funding sources, and regulatory authority (Section 4.4.1).

6) The Authority reviews Implementation Plan and, if acceptable, approves or rejects the Final Deficiency Plan (Section 4.4.2).

For deficiencies caused by large projects, some of the analysis required in these steps may have been completed through the projects' EIRs. While the analysis and any other relevant documentation may be used *verbatim* for the Deficiency Plan or Implementation Plan, the Final Deficiency Plan documentation must conform to the requirements outlined in the six steps above and described in more detail below.

4.2.1 Mitigation Plan to Remedy the Specific Deficiency

Analysis of Deficiency's Causes
State law require the Deficiency Plan to identify the causes of the deficiency [Government Code § 65089.3(b)(1)(A)]. The lead department may apply the Authority's Finding of a Deficiency as supporting analysis of the deficiency's causes. This analysis is not intended to be exhaustive or highly detailed. Sketch planning methods using standard procedures are adequate.

The analysis of the deficiency's causes should include the effects of future CIP improvements. A deficiency may be removed when a roadway improvement programmed in the CIP increases the capacity of the roadway in question. If the lead department determines that the effects of any CIP improvement scheduled to begin within the seven year time horizon of the CIP will remove the deficiency, the Authority -- after review -- can make a Finding of No Deficiency. The lead department, however, must demonstrate this CIP improvements will be completed and functioning within ten years of the current CIP.

Improvements to Remedy Deficiency
Once the cause(s) of the deficiency have been determined, State law [Government Code § 65089.4 (c) (2)] requires that the lead department identify:

> *"A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements."*

This requirement is intended to encourage the lead department to try to remove the deficiency through direct improvement of the roadway (i.e., improve the performance of that segment to LOS "E" of better). The lead department will use sketch planning methods consistent with both MTC practices and data and with the Authority's Travel Demand Guidelines (Chapter 10) to estimate the effects of the improvements on traffic flow on the deficient facility. The estimation methodology measures the effects of capacity improvements on the level of service and indicates whether the improvements provide capacity at an order-of-magnitude commensurate with the deficiency.

The compilation of this list should include any relevant projects included in the CIP or mitigation measures included in specific EIRs. The lead department should provide detailed descriptions of any EIR mitigation requirements A proposed Mitigation Plan may include the same (or modifications to) improvements already specified and funded in an EIR, the CIP, or developer exactions or dedications found to be relevant, including scheduled implementation, project characteristics, and funding sources.

Cost of Improvements
Once the lead department has specified a sufficient number of improvements to mitigate the deficiency, it should prepare cost estimates. The estimates should include all costs (i.e., right-of-way acquisition, construction, design, etc.) and a description of

funding identified for these improvements, including those already specified as mitigation measures in any approved EIRs. If detailed cost information is not available from an existing, reliable source, the lead department may use standard procedures to estimate an order-of-magnitude cost.

Conclusions
The result of this effort is a Mitigation Plan. The Mitigation Plan must include the following:

1) An estimate of the extra roadway capacity needed to remove the deficiency (i.e., improve the LOS to Level "E" or better).

2) An estimate of the total costs (operating and capital) of the capacity improvements

3) A description of which improvements are already funded through measures required by project approval, the CIP or developer exactions or dedications already required (see Exhibit 2).

If the Mitigation Plan concludes that deficiency can be removed from the segment in question through feasible improvements, the lead department should prepare an implementation plan for the Mitigation Plan according to the process described in Section 4.4).

4.2.2 Mitigation Plan Evaluation

Within 30 days of receiving the Mitigation Plan from the lead department, the Authority evaluates the adequacy of the Plan conclusions according to the following three criteria:

1) **Sufficient Improvements to Capacity:** Are the proposed improvements adding sufficient capacity to the roadway in question to increase the LOS to level "E" or better?

2) **Financially Reasonable:** Are the cost estimates for the proposed improvement reasonably accurate? If the Mitigation Plan's conclusions regarding the feasibility or unfeasibility of funding the improvements reasonable, especially with regard to the potential variations of funding, timing of fund flow, and the level of control over the source of funding?

3) **Implementability:** Can the Plan overcome environmental, regulatory, community obstacles within the ten year time frame and does the lead department have sufficient cooperation from other departments and agencies involves in the Plan's implementation? Are the modifications to the CIP, if any, reasonable.

Based on the lead department's submittal (and the feasibility criteria above), the Authority will make a finding of either feasibility or unfeasibility. If the Mitigation Plan is feasible, the lead department will prepare an Implementation Plan (see Section 4.4). If the Authority finds that the Mitigation Plan is not feasible, the lead department will prepare a Deficiency Plan Action List (see Section 4.3).

4.3 Deficiency Plan Action List Preparation

If the Authority determines that the Mitigation Plan is infeasible, the lead department prepares a list of offsetting actions that will improve the system-wide multi-modal level of service but may have only limited effect on the deficient facility itself. The Authority will review this proposed list and approve or reject it.

4.3.1 Action Selection

The lead department will select actions according to two criteria: 1) actions that have some direct mitigating effect on the deficiency; and 2) global actions that will measurably improve multi-modal LOS somewhere in the system. These criteria suggest the following categories of actions:

1) **Deficiency-Specific Actions**: These actions should be in close proximity to the deficient facility or cause a measurable improvement in the performance of the deficient facility. Such actions may include some of the improvements specified in the Mitigation Plan (see Subsection 3.3). They may, for instance, be based on mitigation measures that were included in a project EIR but rejected by the decisionmaker as infeasible, if the basis for the infeasibility finding has been removed by, for example, new legislation authorizing imposition of transportation exactions that has been adopted since project approval and that is applicable retroactively, or new funding sources that have been obtained to provided additional transit service..

2) **Global Actions To Improve System-wide Multimodal LOS**: These are actions aimed at improving system-wide LOS. In general, these actions may involve advancing the scheduled implementation of CIP projects, or reconsideration of projects that were considered but not included in the current CIP. They may also involve services or multimodal programs that may help shift travel demand away from single occupant vehicles or discourage or eliminate some of those trips. The selection of non-CIP projects as deficiency plan actions will require Authority approval in order to maintain the integrity of the CIP process.

The Bay Area Air Quality Management District (BAAQMD) has prepared a list of approved Deficiency Plan actions. The CMP legislation requires that all deficiency plan actions come from that list. In general, this list favors actions that relieve congestion through increased use of alternatives to the single occupancy vehicle (e.g., transit, pedestrian, bicycle, telecommuting, TDM measures, etc.).

The lead department has 60 days to prepare a Preferred Action Plan List. Each action on the list must show its estimated capital (or start-up) and operating (or on-going) costs. The lead department submits this list to the Authority for its consideration.

Depending on the complexity and severity of the deficiency, the lead department may choose to prepare (or Authority may request) one or more alternative action plans. The alternative plans may vary regarding cost, policy priorities (e.g., transit versus roadway), or functional approach (e.g., TSM-based actions versus capital-intensive actions). Alternative action plans, for example may stress more land use-intensive actions, transit-intensive actions, or congestion pricing strategies.

4.3.2 Action Plan List Review

The Authority will evaluate the preferred Deficiency Plan Action List, including each action's estimate cost within 30 days of submittal by the lead department. The Authority's review consists of a three step procedure: 1) apply adequacy criteria; 2) evaluate sufficiency of Action Plan; and 3) issue findings.

Adequacy Criteria

The CMP legislation, as amended, includes three transit performance measures (in addition to the LOS performance measure) for the evaluation of current and future system performance and the effectiveness of Deficiency Action Plans [Government Code § 65089.(b)(2)]. The three additional transit performance measures gauge public transit frequency, routing, and coordination. Through future CMP updates or amendments, the Authority may adopt additional multimodal performance measures which will then be used to evaluate the proposed list of Deficiency Plan Actions.

Action List Sufficiency
The Authority's evaluation of the proposed Action List involves some estimate of benefits and costs. The Authority is developing a set of multi-modal performance measures as part of its 1995 CMP update. These measures are more sensitive to the effects of a broader range of actions than the traditional roadway LOS measure. The Authority will evaluate the sufficiency of the entire action list as a package rather than try to measure the effects of individual actions or combinations of actions. See Chapter 5 for a detailed description of the multimodal performance measures.

Issuance of Adequacy Findings
Within 30 days of the lead department's submittal, the Authority will issue a finding determining whether the Action List its adequate . The Authority's finding will be based on the impact of the proposed actions on system-wide, multimodal performance. The Authority assumes that the lead department has determined it has the financial means and jurisdiction to implement all actions on the list.

4.4 Implementation Plan

The Authority requires the lead department to prepare an Implementation Plan within 90 days as part of the Deficiency Plan Document. This period includes the time for any city commission actions necessary for the execution of the Implementation Plan. The Implementation Plan identifies the responsible implementing department(s) for each action, and the sources of funding. If legislative or administrative authority is necessary, the implementation plan also describes the authority that the implementing department will require to carry out the action.

4.4.1 Implementation Plan Development

The lead department is responsible for developing the Implementation Plan. For each action in the deficiency plan, the lead department must specify the following:

1) The final cost of the actions and the sources of capital (up-front) and operating (on-going) funds. This funding plan should include specific and detailed references to all EIRs that include the same deficiency plan actions as part of their mitigation measures. It must also note any correspondence with CIP projects.

2) A monitoring program to verify the action's implementation. The description of the monitoring program should conform to the CEQA monitoring requirements and must refer to any EIRs that include monitoring of mitigation measures that are the same as the Deficiency Plan Actions.

3) A schedule for implementation. All actions must be implemented within the seven-year time horizon for the current CIP. If a deficiency plan action is programmed for funding in the sixth or seventh year of the CIP, it will need to be fully implemented with three years of its initiation in order to be considered a feasible action within the Deficiency Plan's ten-year horizon.

4) Identification of city departments responsible for the action's funding, implementation, and on-going support/operation. The lead department must assess the likelihood of other departments' ability to implement all actions that the lead department cannot implement itself.

4.4.2 Other Departments

The lead department is unlikely to have comprehensive authority over the implementation of all actions on the approved action list. Clear identification of all departments responsible for implementation, therefore, is essential for the Authority's approval of the

Final Deficiency Plan. Furthermore, the Implementation Plan must include an interdepartmental agreement among all responsible implementing departments stating each department's agreement to fulfill their responsibilities for implementing deficiency plan actions.

4.4.3 Identification of Funding

The Implementation Plan must include a detailed funding plan. This plan must identify specific sources of money and the methods of financing if necessary. Any Deficiency Plan Actions that are included in the CIP may be referenced to that document. If funding for capital projects is already planned and required of developers, the funding plan must reference the development agreement, vested map, or other document committing funds (see Exhibit 2).

Under some circumstances, deficiency plan actions may also depend on capital or operational funds from state or federal sources. Such actions must be included in the Regional Transportation Plan (RTP) Track I project list compiled by MTC. If actions are funded through the City's Downtown Development Fee Program, the Implementation Plan must reference the expenditure plan of the Development Fee Program, indicating the specific funding commitment.

4.4.4 Implementation Plan and Deficiency Plan Approval

Within 30 days of submittal by the lead department, the Authority will either accept or reject the Implementation Plan Once the Authority has approved the Implementation Plan, the lead department will have additional 30 days to finalize and submit the Final Deficiency Plan document for Authority Board approval. Within 30 days of submittal of the final Deficiency plan by the lead department, the Authority Board will hold a noticed public meeting and either approve or reject it.

Note that if the Authority rejects the Implementation Plan, the lead department may either propose an alternative Implementation Plan within 30 days, or choose to submit the Final Deficiency Plan with the Implementation Plan as is. In the latter case, the Authority will notify the Mayor's Office of its intent to reject the Final Deficiency Plan due to the inadequacy of the Implementation Plan.

If the Authority Board rejects the Final Deficiency Plan and issues a finding of nonconformance, pursuant to the State law (Government Code 65089.5), the Authority must submit its findings to MTC and the State Controller for the withholding of State funds.

4.4.5 Deficiency Plan Document Structure

A Deficiency Plan Report must include the following sections:

1.0 Introduction Identification of the Deficiency's Causes, including:
- 1.1 Description of the deficiency (i.e., road segment)
- 1.2 Description of the adjacent facilities
- 1.3 Analysis of the causes of the deficiency.
- 1.4 Description of the existing traffic conditions within the boundaries.
- 1.5 Projection future transportation conditions for at least the next 10 years.
- 1.6 A map of the area, the deficiency, and adjacent facilities and transit routes.

2.0 Mitigation Plan, consisting of:
- 2.1 An estimate of the extra roadway capacity needed to remove the deficiency
- 2.2 An estimate of the total costs (operating and capital) of the capacity improvements
- 2.3 An description of which improvements that are already programmed through individual project conditions of approval,

the CIP, or developer exactions or dedications.

3.0 List of Actions, broken out into:
- 3.1 Deficiency-Specific Actions:
- 3.2 Global Actions To Improve System-wide LOS

4.0 Implementation Plan, specifying the following:
- 4.1 The final cost of the actions and the sources of capital (up-front) and operating (on-going) funds.
- 4.2 A monitoring program to verify the action's implementation.
- 4.3 A schedule for implementation.
- 4.4 Identification of city departments responsible for the action's funding, implementation, and on-going support/operation.

5.0 Identification of Other Departments' Responsibilities for Implementation

6.0 Identification of Funding

5.0 Special Issues

The following sections discuss special circumstances where the Deficiency Plan process, as described in Section 4.0, may have to be modified. Treatment of these issues is not intended to be exhaustive; thus, the Authority may expand this section in the future as it gains experience with guiding deficiency plans preparation.

5.1 Multi-County Deficiency Plans

Deficiencies may occur because of the activities of other counties or they occur on a regional facility (e.g., the Bay Bridge). Under such circumstances, the Authority will take the lead in coordinating the preparation of a Deficiency Plan, following MTC's process and mutual agreements with other agencies. More specifically, the Authority will coordinate with other congestion management agencies (CMAs) and regional agencies (e.g., MTC, BAAQMD, ABAG, etc.). The Authority may request the Mayor's Office to designate other city departments to prepare the Mitigation Plan, Deficiency Plan Action List, or the Implementation Plan. Furthermore, other departments may be designated as the responsible agencies for the implementation of the deficiency plan.

5.2 Deficiency Plans Addressing Multiple Deficiencies

The Mayor's Office may request that the lead department prepare a deficiency plan that covers more than one deficient roadway segment. A consolidated deficiency plan for multiple deficiencies could save the City time, money, and the effort required to prepare multiple deficiency plans. Efficiencies may also be realized if the lead department tackled future deficiencies (identified through the monitoring program described in Chapter 4) as part of a deficiency plan addressing an existing deficiency (see Section 5.3).

Multiple deficiencies may be likely if an area or transportation corridor are impacted by large land use projects (e.g., Mission Bay), significant transportation infrastructure projects (e.g., demolition of the Central Freeway), or pronounced socioeconomic trends (e.g., increased commuting from the East Bay. The multiple deficiencies may be within close geographical proximity or distributed along a corridor (or parallel facility) but they must be functionally related (i.e., result from or be multiple manifestations of the same cause). Under such circumstances, the Authority may encourage a single area-wide, or corridor Deficiency Plan.

The process would be similar to that described in Section 4.0. Nevertheless, the lead department must include the following considerations:

1) Review of past and current EIRs to determine if these documents anticipated the compounding effects of their individual impacts and proposed appropriate mitigation measures.

2) Modeling or estimation of traffic within the area or corridor to determine the effectiveness of the Mitigation Plan improvements and possible synergies between actions on the Deficiency Plan Action List.

3) Consideration of funding, regulatory, or policy issues that may improve or degrade the feasibility of the proposed Implementation Plan.

4) Coordination with the CIP and other transportation programming and/or planning documents designed to address transportation planning for a subarea of the city, a specific corridor, or multiple facilities or modes.

5.3 Future Deficiencies

The legislation does not require that local jurisdictions address deficiencies anticipated through prediction or modeling of future conditions. The requirement for Deficiency Plans is triggered by the results of actual monitoring of the CMP network. Future deficiencies may be predicted by: a) project-specific traffic impact analyses (TIAs); b) project EIRs; and c) program-level EIRs (e.g., the Waterfront Plan EIR)

Over time, the Authority will use information from these *predictive* detection efforts as part of its monitoring procedure. In combination with the procedures described in the Land Use Analysis Guidelines, the Congestion Management Program will improve its ability of to maintain acceptable system performance and prevent or lessen the impacts of future deficiencies. In addition, the Authority will use the Strategic Analysis Reports (SARs) to help highlight the implications of future deficiencies.

The following are special cases where it may be appropriate to prepare a deficiency plan to address future deficiencies.

5.3.1 Multiple Deficiencies

Addressing future deficiencies may be in order if it is found that it would support or complement the development of a deficiency plan for current deficiencies. This could result in efficiencies in terms of deficiency plan preparation efforts and produce a more effective plan. The lead department will include its proposal to address multiple future deficiencies in its Deficiency Plan Action List for review by the Authority.

5.3.2 Future Deficiencies Caused by Changes in Transportation Infrastructure or Land Use

Future changes to the transportation infrastructure or services may cause deficiencies. The demolition of the Central Freeway, for example, could have dramatic impacts on the LOS of Market Street. Most large infrastructure projects will prepare EIRs that analyze potential deficiencies. As noted in Section 2.2, however, a project EIR may not consider the cumulative impacts of the proposed project and the impacts of other likely projects impacting a facility. In addition, an EIR frequently includes a Statement of Overriding Considerations, accepting large transportation impacts in exchange for "larger" benefits and override mitigation measures. Under these circumstances, the lead department preparing the project EIR should be able to incorporate most of the Deficiency Plan requirements into its CEQA documentation.

There are many potential causes of deficiencies, particularly changes to the transportation infrastructure in the city as well as land use changes. The following sections highlight activities by City departments that could impact deficiency planning in San Francisco.

Department of Public Works (DPW)
DPW develops a Capital Improvement Program. This results in numerous construction activities that should help pre-empt

deficiencies. Occasionally, however, some projects may improve public transit and the expense of mixed flow. According to the legislation, the Authority must declare a deficiency when LOS for mixed flow falls below level E.

Department of Parking and Traffic (DPT)

DPT regulates on street parking and some small off-street lots throughout the city and oversees signal timing and interconnects. Typically, none of these activities require formal transportation impact analysis. DPT, however, may become involved in some large scale roadway projects. For example, DPT, is the lead agency on the Central Freeway replacement study. The demolition of the central freeway may force traffic to cross Market Street at grade. Combined with the construction of the F-Line, Some parts of Market Street may become deficient (i.e., LOS "F").

Muni

As the agency that plans and operates the city's public transit system, Muni's activities have direct impacts on the transportation system's LOS. To the degree that a traveler may choose between Muni and driving their car, Muni ridership levels affect congestion levels. In turn, mode choice is affected by the quality of service Muni provides. Operating changes and fare increases could result in modes shift significant enough to trigger deficiencies. Changes is operating policies (e.g., distance between bus stops) or even capital improvements (e.g., installation of bus stops can also result in deficiencies).

San Francisco Redevelopment Agency (SFRA)

SFRA has jurisdiction over numerous development projects throughout the city. These activities include the Hunter's Point and Treasure Island base conversion projects, Yerba Buena Center, Rincon Point South Beach, and many other residential infill projects.

Port of San Francisco

The Port of San Francisco has jurisdiction over the seven and a half miles of Bayside waterfront, running from the Hyde Street Pier (Fisherman's Wharf) to India Basin (Pier 98) and from the piers themselves to adjacent parcels (sea wall lots) .

- **Waterfront Plan:** For the first time in the City's history, the Port of San Francisco has prepared a waterfront plan regulating future development of the seven and a half miles of waterfront property. The plan provides for a wide range of land uses and has strict design guidelines that will control traffic impacts. Nevertheless, the majority of potential land use will generate considerably more trips than current uses; thus, deficiencies are likely.

- **Pier 45, Boat Harbor Expansion and Underwater World:** Pier 45 has been extensively renovated after the Loma Prieta earthquake. The renovations include more intensive fish handling and processing facilities, more parking capacity, a Marine Fisheries Institute, and a wide apron for public access. In addition, a proposed expansion of the adjacent boat harbor will add 100 new berths and increase fishing charters, bay tours, and transient boat activities. Finally, Pier 39 will be adding its new aquarium, Underwater World. In combination, these activities will add new trips to an already congested area.

Planning Department

The Planning Department is responsible for land use planning and development management. This role, stipulated in the City Charter, gives the Planning Department direct or oversight responsibility for every land use project from its initial design stages through environmental impact analysis, to final completion. The Authority expects the total amount of small scale growth that can occur over the next twenty years to be insufficient to cause deficiencies. Large-scale projects, however, will have major impacts. Example of such projects include:

- Revised Mission Bay Project;
- Rincon Point South Beach;
- Re-Use of Presidio Army Base, Treasure Island, and Hunter's Point Naval Shipyard;
- Revised South of Market Specific Plan;
- Mid-Embarcadero Open Space Project;
- New federal and state office Buildings; and
- Transbay Terminal Rehabilitation or Replacement.

In addition, the Planning Department oversees preparation of Transportation Impact Analyses (TIAs) and its Office of Environmental Review (OER) is often the coordinating agency for a project's initial CEQA review and EIR preparation. All of these documents are intended to anticipate the impacts of a proposed project on the transportation system; thus, they have direct relevance to the Deficiency Plan if a project's impacts cause a deficiency.

Work Program Items - Key Milestones

- Issue final determination of deficiency on LOS F segments and notify City Departments - By April 1996
- Provide review and comments to City Departments preparing Deficiency Plans - After April 1996, as required
- Review and approve final Deficiency Plans submitted by City Departments- By April 1996, as required
- Monitor Deficiency Plan implementation - April 1996, as required

CHAPTER 10

TRAVEL DEMAND MODEL AND UNIFORM DATABASE

Key Topics:

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **Methodology and Guidelines**
- **Timetable for Implementation and Interim Approach**
- **Work Program Items -Key Milestones**

1. Legislative Requirements

California Government Code section 65089 (c) requires that each Congestion Management Agency, in consultation with the regional transportation planning agency (MTC in the Bay Area), the county, and local jurisdictions, develop for a uniform database on traffic impacts for use in a countywide transportation computer model. The CMA must approve computer models used for county sub-areas, including models used by local jurisdictions for land use impact analysis. All models must be consistent with the modeling methodology and databases used by the regional transportation planning agency.

2. Legislative Intent and Application to San Francisco

One of the most significant issues contributing to the enactment of congestion management legislation is the difficulty of determining responsibility for transportation system impacts when they result from land use decisions taken by several local jurisdictions, or when the impacts are felt across local jurisdictional boundaries.

The intent of the requirement for travel demand models was to identify a technical *tool* that could address these issues from the perspective of a uniform technical basis for analysis, and provide answers which, although not explicitly stated in the legislation, would lead to inter jurisdictional agreements involving the assessment of mitigation fees to adjust the transportation system's capacity to absorb development.

As a unified City and County, San Francisco does not have to contend with the issue of estimating transportation impacts across city boundaries, although inter-county impacts must still be considered. However, the development of a method for travel demand forecasting for San Francisco presents a different set of challenges, of a technical nature, because of the difficulties inherent in accurately forecasting travel by modes other than the private automobile, such as transit and pedestrian trips. The approach to development of a travel demand analysis methodology for San Francisco's CMP is focused on these issues.

3. Methodology and Guidelines

a. Methodology

A methodology and guidelines for travel demand forecasting will be developed by the Authority during fiscal year 1993-4. The process for methodology development will include an evaluation of current software options available for computerized travel demand modeling. This evaluation will be part of a larger exploration of feasible methods to obtain travel demand forecasts to suit San Francisco's CMP process and other related data needs. The potential uses and limitations of continuing to rely on the MTC's regional model will also be considered, as an option to developing an entirely new model for San Francisco.

A major consideration in identifying the appropriate methodology for San Francisco is cost. Complex computerized travel demand models can only be built at great expense, and require major commitments to maintain and update them. Over the past two decades, because the market for computerized model applications has been largely suburban, models have evolved and improved in their accuracy to predict automobile trips. This trend has been reinforced by the widespread use and increasing sophistication of traffic engineering programs, which can be used in conjunction with travel demand models for specific purposes, such as intersection analyses.

Computerized models have traditionally not performed reliably enough when it comes to predicting ridership on alternative transportation modes, particularly bus transit or pedestrian trips, but this is also true for auto-based trips such as carpools and vanpools, which tend to exhibit characteristics different from single automobile trips. The level of investment in a computerized model must be weighed against its ability to deliver, with more than marginal reliability, the types of data that would be meaningful for the strategic analysis purposes of the San Francisco CMP.

Another significant consideration is the accuracy of the database used in the travel demand forecasting process. The explanatory power of a computerized model will only be a reflection of the quality of the underlying database. A sketchy database will ensure unreliable results, particularly if it is not kept up to date. Database upkeep can be a major associated expense, but costs can be mitigated by building reporting requirements into existing development impact guidelines and other land use and demographic analysis procedures. In developing a database for analysis of impacts, the Authority will maximize utilization of already existing information, and will emphasize coordination with City departments so that data collection efforts undertaken for special purposes, such as the 1995 travel behavior survey to demonstrate air quality compliance, are designed to provide information useful to the travel demand forecasting process, as well.

Even when supported by an accurate database, a computerized travel model will require major fine-tuning before it can accurately reflect travel behavior in an environment like San Francisco, with its high intensity of economic activity crammed into a reduced geographic area replete with travel choices. A comprehensive, accurate, and well-maintained database, on the other hand, is very desirable in its own right, and can be used for analysis even in the absence of a computerized model. Granted, the types of analysis that could be performed would be more limited, but so would be the costs.

The preceding discussion highlights the need to carefully consider all the options before making a major financial commitment to a travel forecasting path. Figure 10-1 shows the proposed process for identifying the method best suited for our purposes. The process will take into account CMP requirements, potential applications of forecasting tools to serve the needs of City departments involved in travel analysis, and a number of other factors. The process will result in recommendations for a specific method and an implementation timetable.

Potential applications include the following:

- Analysis of subarea plans and major development proposals
- Update of the Transportation Element of the City's General Plan
- Assessment of auto diversion potential and vehicle emission impacts of alternative transportation improvements
- Assessment of ridership impacts of alternative transit services

- Traffic engineering applications

b. Guidelines

Travel demand forecasting guidelines will be developed as a corollary to the choice of a forecasting methodology. The guidelines will spell out the details of the methodology and procedures to be followed in developing travel forecasts for CMP purposes. The guidelines will be closely coordinated with those developed for land use analysis and deficiency plans.

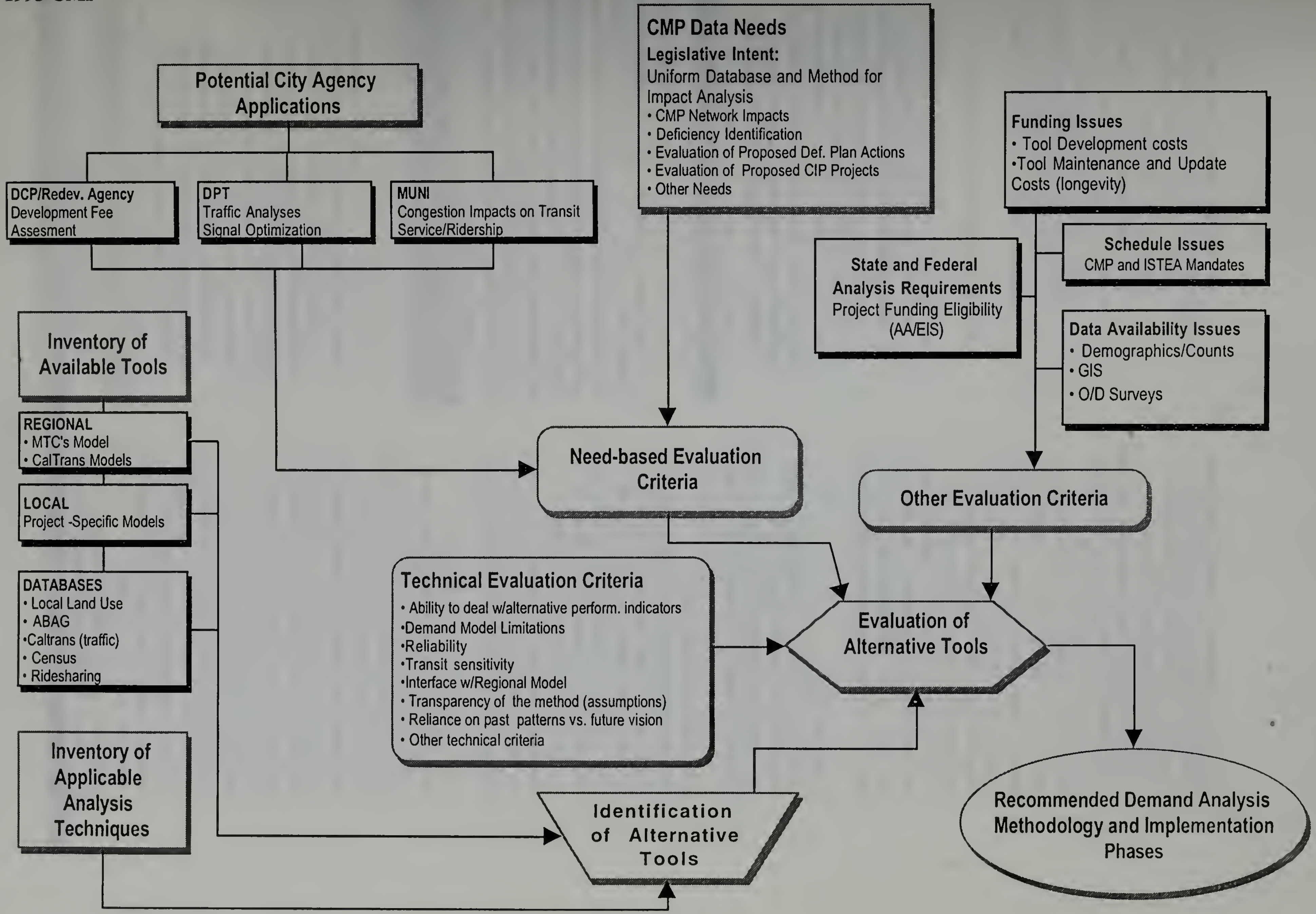
4. Timetable for Implementation and Interim Approach

It is anticipated that the methodology and guidelines for travel demand forecasting will be finalized by March 1994, and adopted by the Authority Board in May. In the meantime, the current transportation impacts analysis methods (see Appendix IV) will be used as an interim approach for CMP purposes, complemented by special analyses, as appropriate.

5. Work Program Items - Key Milestones

- Methodology development, Phase 1: identification of needs and constraints, inventory of tools and techniques - By May 1994
- Draft Methodology and Guidelines - By September 1994
- Final Methodology and Guidelines - By January 1995

Figure 10-1
Travel Demand Analysis Methodology Development Process


Potential City Agency Applications
DCP/Redev. Agency
Development Fee Assesment
DPT
Traffic Analyses
Signal Optimization
MUNI
Congestion Impacts on Transit Service/Ridership
CMP Data Needs
Legislative Intent:
Uniform Database and Method for Impact Analysis
• CMP Network Impacts
• Deficiency Identification
• Evaluation of Proposed Def. Plan Actions
• Evaluation of Proposed CIP Projects
• Other Needs
Funding Issues
• Tool Development costs
•Tool Maintenance and Update Costs (longevity)
Schedule Issues
CMP and ISTEA Mandates
State and Federal Analysis Requirements
Project Funding Eligibility (AA/EIS)
Data Availability Issues
• Demographics/Counts
• GIS
• O/D Surveys
Inventory of Available Tools
REGIONAL
• MTC's Model
• CalTrans Models
LOCAL
Project -Specific Models
DATABASES
• Local Land Use
• ABAG
•Caltrans (traffic)
• Census
• Ridesharing
Inventory of Applicable Analysis Techniques
Need-based Evaluation Criteria
Other Evaluation Criteria
Technical Evaluation Criteria
• Ability to deal w/alternative perform. indicators
•Demand Model Limitations
•Reliability
•Transit sensitivity
•Interface w/Regional Model
• Transparency of the method (assumptions)
• Reliance on past patterns vs. future vision
• Other technical criteria
Evaluation of Alternative Tools
Identification of Alternative Tools
Recommended Demand Analysis Methodology and Implementation Phases

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APPENDIX I

California Government Codes Referencing Congestion Management Programs

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CMP Legislation As Amended In Assembly Bill 1963

The people of the State of California do enact as follows:

65088.1. As used in this chapter the following terms have the following meanings:

(a) Unless the context requires otherwise, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

(b) Unless the context requires otherwise, "agency" means the agency responsible for the preparation and adoption of the congestion management program.

(c) "Commission" means the California Transportation Commission.

(d) "Department" means the Department of Transportation.

(e) "Local jurisdiction" means a city, a county, or a city and county.

(f) "Parking cash-out program" means an employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. "Parking subsidy" means the difference between the out-of-pocket amount paid by an employer on a regular basis in order to secure the availability of an employee parking space not owned by the employer and the price, if any, charged to an employee for use of that space.

A parking cash-out program may include a requirement that employee participants certify that they will comply with guidelines established by the employer designed to avoid neighborhood parking problems, with a provision that employees not complying with the guidelines will no longer be eligible for the parking cash-out program.

(g) "Urbanized area" has the same meaning as is defined in the 1990 federal census for urbanized areas of more than 50,000 population.

(h) "Interregional travel" means any trips that originate outside the boundary of the agency. A "trip" means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. A roundtrip consists of two individual trips.

(i) "Multimodal" means the utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized and demand management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies varies by county and region in accordance with the size and complexity of different urbanized areas.

(j) "Level of service standard" is a threshold that defines a deficiency on the congestion management program highway and road system which requires the preparation of a deficiency plan. It is the intent of the Legislature that the agency shall use all elements of the program to implement strategies and actions that avoid the creation of deficiencies and to improve multimodal mobility.

(k) "Performance measure" is an analytical planning tool that is used to quantitatively evaluate transportation improvements and to assist in determining effective implementation actions, considering all modes and strategies. Use of a performance measure as part of the program does not trigger the requirement for the preparation of deficiency plans.

65089. (a) A congestion management program shall be developed, adopted, and updated biennially consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department, and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by the resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be designated as part of the system. Level of service (LOS) shall be measured by Circular 212, (or by the most recent version of the Highway Capacity Manual), or by a uniform methodology adopted by the agency which is consistent with the Highway Capacity Manual. The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department shall make this determination instead if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A. When the level of service on a segment or at an intersection fails to attain the established level of service standard, a deficiency plan shall be adopted pursuant to Section 65089.4.

(2) A performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance measures shall incorporate highway and roadway system performance, and measures established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators. These performance measures shall support mobility, air quality, land use, and economic objectives, and shall be used in the development of the capital improvement program required pursuant to paragraph (5), deficiency plans required pursuant to Section 65089.4, and the [illegible] program required pursuant to paragraph (4).

(3) (A) A trip reduction and travel demand element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including flexible work hours and parking management programs. The agency shall consider parking cash-out programs during the development and annual update of the trip reduction and travel demand element.

(B) The agency and respective air pollution control district or air quality management district shall coordinate the development of trip reduction responsibilities and shall avoid duplication of responsibilities between agencies. A multiple site employer, as specified in paragraph (4) of subdivision (e) of Section 40717 of the Health and Safety Code, shall have the option of complying with a district employer trip reduction rule, or a similar rule proposed pursuant to a federal implementation plan, and reporting directly to the district or a responsible federal or state agency. A multiple site employer that exercises this option shall be exempt from any employer-based trip reduction requirement imposed pursuant to the trip reduction and travel demand element.

(C) Except for paragraph (B), nothing in this section prevents a local jurisdiction from adopting transportation demand management measures that include or exceed the requirements established by the agency or by the air pollution control district or air quality management district.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private contributions to improvements to regional transportation systems. However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the

amount of the credit to be provided. The program defined under this section may require implementation through the requirements and analysis of the California Environmental Quality Act, in order to avoid duplication.

(5) A seven-year capital improvement program, developed using the performance measures described in paragraph (2) to determine effective projects that maintain or improve the performance of the multimodal system for the movement of people and goods, to mitigate regional transportation impacts identified pursuant to paragraph (4). The program shall conform to transportation-related vehicle emission air quality mitigation measures, and include any project that will increase the capacity of the multimodal system. It is the intent of the Legislature that, when roadway projects are identified in the program, consideration be given for maintaining bicycle access and safety at a level comparable to that which existed prior to the improvement or alternation. The capital improvement program may also include safety , maintenance, and rehabilitation projects that do not enhance the capacity of the system but are necessary to preserve the investment in existing facilities.

(c) The agency, in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency.

(d) (1) The city or county in which a commercial development will implement a parking cash-out program which is included in a congestion management program pursuant to subdivision (b), or in a deficiency plan pursuant to Section 65089.4, shall grant to that development an appropriate reduction in the parking requirements otherwise in effect for new commercial development.

(2) At the request of an existing commercial development that has implemented a parking cash-out program, the city or county shall grant an appropriate reduction in the parking requirements otherwise applicable based on the demonstrated reduced need for parking, and the space no longer needed for parking purposes may be used for other appropriate purposes.

(e) Pursuant to the federal Intermodal Surface Transportation Efficiency Act of 1991 and regulations adopted pursuant to the act, the department shall submit a request to the Federal Highway Administration Division Administrator to accept the congestion management system otherwise required by the act.

65089.2. (a) Congestion management programs shall be submitted to the regional agency. The regional agency shall evaluate the consistency between the program and the regional transportation plans required pursuant to Section 65080. In the case of multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.

(b) The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program.

(c) (1) The regional agency shall not program any surface transportation program funds and congestion mitigation and air quality funds pursuant to Section 182.6 and 182.7 of the Streets and Highways Code in a county unless a congestion management program has been adopted by December 31, 1992, as required pursuant to Section 65089. No surface transportation program funds or congestion mitigation and air quality funds shall be programmed for a project in a local jurisdiction that has been found to be in nonconformance with a congestion management program pursuant to Section 65089.5 unless the agency finds that the project is of regional significance.

(2) Notwithstanding any other provision of law, upon the designation of an urbanized area, pursuant to the 1990 federal census or a subsequent federal census, within a county which previously did not include an urbanized area, a congestion management program as required pursuant to Section 65089 shall be adopted within a period of 18 months after designation by the Governor.

(d) (1) It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas.

(2) It is the further intent of the Legislature that disputes which may arise between regional agencies, or agencies which are not within the boundaries of a multicounty regional transportation planning agency, should be mediated and resolved by the Secretary of the Business, Housing and Transportation Agency, or an employee of that agency designated by that secretary, in consultation with the air pollution control district or air quality management district within whose boundaries the regional agency or agencies are located.

65089.3.(a) The agency shall monitor the implementation of all elements of the congestion management program. The department is responsible for data collection and analysis on state highways, unless the agency designates that responsibility to another entity. The agency may also assign data collection and analysis responsibilities to other owners and operators of facilities or services if the responsibilities are specified in its adopted program. The agency shall consult with the department and other affected owners and operators in developing data collection and analysis procedures and schedules prior to program adoption. At least biennially, the agency shall determine if the county and cities are conforming to the congestion management program, including, but not limited to, all of the following:

(a) Consistency with levels of service standards, except as provided in Section 65089.4.

(b) Adoption and implementation of a trip reduction and travel demand ordinance.

(c) Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

(d) Adoption and implementation of a deficiency plan pursuant to Section 65089.4 when highway and roadway level of service standards are not maintained on portions of the designated system.

65089.4. (a) A local jurisdiction shall prepare a deficiency plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The deficiency plan shall be adopted by the city or county at a noticed public hearing.

(b) The agency shall calculate the impacts subject to exclusion pursuant to subdivision (f) of this section, after consultation with the regional agency, the department, and the local air quality management district or air pollution control district. If the calculated traffic level of service following exclusion of these impacts is consistent with the level of service standard, the agency shall make a finding at a publicly noticed meeting that no deficiency plan is required and so notify the affected local jurisdiction.

(c) The agency shall be responsible for preparing and adopting procedures for local deficiency plan development implementation responsibilities, consistent with the requirements of this section. The deficiency plan shall included all of the following:

(1) An analysis of the causes of the deficiency. The analysis shall include the following:

(A) Identification of the cause of the deficiency.

(B) Identification of the impacts of those local jurisdictions within the jurisdiction of the agency that contribute to the deficiency. These impacts shall be identified only if the calculated traffic level of service following exclusion of impacts pursuant to subdivision (f) indicates that the level of service standard has not been maintained, and shall be limited to impacts not subject to exclusion.

(2) A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.

(3) A list of improvements, programs, or actions, and estimates of costs, that will (A) measurably improve multimodal performance, using measures defined in paragraphs (1) and (2) of subdivision (b) of Section 65089, and (B) contribute to significant improvements in air quality, such as improved public transit service and facilities, improved non motorized transportation facilities, high occupancy vehicle facilities, parking cash-out programs, and transportation control measures. The air quality management district or the air pollution control district shall establish and periodically revise a list of approved improvements, programs, and actions which meet the scope of this paragraph. If an improvement, program or action is on the approved list and has not yet been fully implemented, it shall be deemed to contribute to significant improvements in air quality. If an improvement, program, or action is not on the approved list, it shall not be implemented unless approved by the local air quality management district or air pollution control district.

(4) An action plan, consistent with the provisions of Chapter 5 (commencing with Section 66000), that shall be implemented, consisting of improvements identified in paragraph (2), or improvements, programs, or actions identified in paragraph (3), that are found by the agency to be in the interest of the public health, safety and welfare. The action plan shall include a specific implementation schedule. The action plan shall include implementation strategies for those jurisdictions that have contributed to the cause of the deficiency in accordance with the agency's deficiency plan procedures. The action plan need not mitigate the impacts of any exclusion identified in subdivision (f). Action plan strategies shall identify the most effective implementation strategies for improving current and future system performance.

(d) A local jurisdiction shall forward its adopted deficiency plan to the agency within 12 months of the identification of a deficiency. The agency shall hold a noticed public hearing within 60 days of receiving the deficiency plan. Following the hearing, the agency shall either accept or reject the deficiency plan in its entirety, but the agency may not modify the deficiency plan. If the agency rejects the plan, it shall notify the local jurisdiction of the reasons for that rejection, and the local jurisdiction shall submit a revised plan within 90 days addressing the agency's concerns. Failure of a local jurisdiction to comply with the schedule and requirements of this section shall be considered to be nonconformance for the purposes of Section 65089.5.

(e) The agency shall incorporate into its deficiency plan procedures, a methodology for determining if deficiency impacts are caused by more than one local jurisdiction within the boundaries of the agency.

(1) If, according to the agency's methodology, it is determined that more than one local jurisdiction is responsible for causing a deficient segment or intersection, all responsible local jurisdictions shall participate in the development of a deficiency plan to be adopted by all participating local jurisdictions.

(2) The local jurisdiction in which the deficiency occurs shall have lead responsibility for developing the deficiency plan and for coordinating with other impacting local jurisdictions. If a local jurisdiction responsible for participating in a multi-jurisdictional deficiency plan does not adopt the deficiency plan in accordance with the schedule and requirements of paragraph (a) of this section, that jurisdiction shall be considered in nonconformance with the program for purposes of Section 65089.5.

(3) The agency shall establish a conflict resolution process for addressing conflicts or disputes between local jurisdictions in meeting the multi-jurisdictional deficiency plan responsibilities of this section.

(f) The analysis of the cause of the deficiency prepared pursuant to paragraph (1) of subdivision (c) shall exclude the following:

(1) Interregional travel.

(2) Construction, rehabilitation, or maintenance of facilities that impact the system.

(3) Freeway ramp metering.

(4) Traffic signal coordination by the state or multijurisdictional agencies.

(5) Traffic generated by the provision of low and very low income housing.

(6)(A) Traffic generated by high density residential development located within one-fourth of a mile of a fixed rail passenger station.

(B) Traffic generated by any mixed use development located within one-fourth of a mile of a fixed rail passenger station, if more than half of the land area, or floor area, of the mixed use development is used for high density residential housing, as determined by the agency.

(g) For the purposes of this section, the following terms have the following meanings:

(1) "High density" means residential density development which contains a minimum of 24 dwelling units per acre and a minimum density per acre which is equal to or greater than 120 percent of the maximum residential density allowed under the local general plan and zoning ordinance. A project providing a minimum of 75 dwelling units per acre shall automatically be considered high density.

(2) "Mixed use development" means development which integrates compatible commercial or retail uses, or both, with residential uses, and which, due to the proximity of job locations, shopping opportunities, and residences, will discourage new trip generation.

65089.5. (a) If, pursuant to the monitoring provided for in Section 65089.3, the agency determines, following a noticed public hearing, that a city or county is not conforming with the requirements of the congestion management program, the agency shall notify the city or county in writing of the specific areas of nonconformance. If, within 90 days of the receipt of the written notice of nonconformance, the city or county has not come into conformance with the congestion management program, the governing body of the agency shall make a finding of nonconformance and shall submit the finding to the commission and to the Controller.

(b)(1) Upon receiving notice from the agency of nonconformance, the Controller shall withhold apportionments of funds required to be apportioned to that nonconforming city or county by Section 2105 of the Streets and Highways Code.

(2) If, within the 12-month period following the receipt of a notice of nonconformance, the Controller is notified by the agency that the city or county is in conformance, the Controller shall allocate the apportionments withheld pursuant to this section to the city or county.

(3) If the Controller is not notified by the agency that the city or county is in conformance pursuant to paragraph (2), the Controller shall allocate the apportionments withheld pursuant to this section to the agency.

(c) The agency shall use funds apportioned under this section for projects of regional significance which are included in the capital improvement program required by paragraph (5) of subdivision (b) of Section 65089, or in a deficiency plan which has been adopted by the agency. The agency shall not use these funds for administration or planning purposes.

65089.6. Failure to complete or implement a congestion management program shall not give rise to a cause of action against a city or county for failing to conform with its general plan, unless the city or county incorporates the congestion management program into the circulation element of its general plan.

65089.7. A proposed development specified in a development agreement entered into prior to July 10, 1989, shall not be subject to any action taken to comply with this chapter, except actions required to be taken with respect to the trip reduction and travel demand element of a congestion management program pursuant to paragraph (3) of subdivision (b) of Section 65089.

65089.8 (a) Buildings and structures that were damaged or destroyed in Los Angeles County as a result of the civil unrest during the state of emergency declared by the Governor on April 29, 1992, are not subject to the requirements of this chapter when permission is sought to repair or rebuild. This section does not exempt buildings or structures from any other requirement of the local jurisdiction otherwise applicable.

(b) This section shall become inoperative on June 1, 1995, and as of January 1, 1996, is repealed, unless a later enacted statute, which becomes effective on or before January 1, 1996, deletes or extends the dates on which it becomes inoperative and is repealed.

65089.9. The study steering committee established pursuant to Section 6 of Chapter 444 of the Statutes of 1992 may designate at least two congestion management agencies to participate in a demonstration study comparing multimodal performance standards to highway level of service standards. The department shall make available, from existing resources, fifty thousand dollars ($50,000) from the Transportation Planning and Development Account in the State Transportation Fund to fund each of the demonstration projects. The designated agencies shall submit a report to the Legislature not later than June 30, 1997, regarding the findings of each demonstration project.

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APPENDIX II

Regional (MTC) Guidance Regarding the Development of Congestion Management Programs

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MTC
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MEMORANDUM

To: Work Program Committee Date: March 10, 1995

Fr: Deputy Executive Director

Re: Guidance for Consistency of CMPs with the RTP: Revisions to Resolution No. 2537

Background

Congestion Management Programs (CMPs) were established as part of a bi-partisan legislative package in 1989, and approved by the voters in 1990. The legislation increased transportation revenues and changed state transportation planning and programming processes. The CMP statutes established specific mandatory requirements which must be satisfied in order for local jurisdictions to receive certain gas tax subvention funds, and mandated a role for the CMPs in the development of the Regional Transportation Improvement Program (RTIP).

The CMP statutes also specified that the regional agency, i.e., MTC in the Bay Area, evaluate the consistency of the CMPs with the Regional Transportation Plan (RTP), and, upon a finding of consistency, incorporate the CMPs into the RTIP.. In June 1990, MTC adopted Res. No. 2166 to establish guidelines for determining consistency of CMPs with the RTP. In April 1993, MTC adopted a new resolution, No. 2537, to update the guidelines in response to changes in CMP statutes.

Since the adoption of Res. No. 2537, statutes concerning CMPs were further revised through the passage of AB 1963 and AB 1619, and MTC adopted the 1994 Regional Transportation Plan. The attached proposed revisions to MTC Resolution No. 2537 are intended to respond to these changes.

Proposed Revisions

In particular, revisions are proposed to:

- Reflect the overall regional policies established in the final 1994 Regional Transportation Plan (RTP).
- Focus on MTC's role in determining consistency of CMPs with the RTP, and the relationship of the CMPs to the regional transportation planning process.
- Reflect, as appropriate, changes in CMP statutes established through passage of AB 1963. An overview of major changes established through AB 1963 is included in this cover memo as Exhibit 1: however, our proposed Consistency Guidance focuses only on consistency requirements. It does not address the extent to which CMAs have satisfied other CMP requirements.

- Incorporate changes made in the State Transportation Control Measures (TCMs), as established in the 1994 Bay Area Clean Air Plan.

- Incorporate changes made in the modeling checklist developed through the work of the Modeling Coordination Subcommittee of the Partnership.

- Reflect the passage of AB 1619, which modified statutes regarding countywide transportation plans and elaborated on their relationship to CMPs.

MTC Responsibilities

MTC's responsibilities under CMP statutes are primarily oriented toward determining consistency with the RTP. Consistency will be evaluated based upon:

1) Goals and objectives established in the RTP.
2) Consistency of the system definition with adjoining counties.
3) Consistency with pertinent Air Quality Plans, as incorporated in the RTP.
4) Consistency with the MTC Travel Demand Modeling Databases and Methodologies.
5) RTP Financial Requirements and Projections.

Upon a finding of consistency, MTC shall incorporate the program into the Regional Transportation Improvement Program (RTIP), subject to specific programming and funding requirements. MTC's multimodal priority setting process is specified in MTC Res. No. 2526, revised.

Proposed Schedule for CMPs and the Consistency Review Process

DATE	EVENT	RESPONSIBLE PARTY
March 10	Approval of Guidance on CMP Consistency, forward to full Commission	Work Program Committee
March 22	Adoption of Guidance on CMP Consistency	MTC
June	Draft CMPs submitted to MTC	CMAs
July-October	Staff comments and discussions on CMPs	MTC and CMA staff
October 31	Final CMPs submitted to MTC	CMAs
November 10	Resolution of Consistency Findings of CMPs forwarded to the full Commission	Work Program Committee
November 22	Resolution of Consistency Findings of the CMPs	MTC

MTC staff has requested submittal of final draft CMPs by June 30, in order to allow for RTIP preparation and comments on regional consistency prior to the adoption of the final CMPs. Final CMPs are due to MTC in October. Final consistency findings are scheduled for November.

Recommendation

Staff recommends approval of Resolution No. 2537, revised.

William F. Hein

Exhibit 1

The Legislature passed AB 1963 in September 1994, including the following significant changes in CMP statutes:

Biennial monitoring of local conformance

Requires that CMAs monitor local conformance to the CMP at least biennially, rather than annually.

Performance element including performance measures

Requires a "performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods" in substitution for the previously separate transit element. Additionally the new language requires that these performance measures be used in the development of the Capital Improvement Program, deficiency plans, and land use analysis programs.

Coordination of trip reduction responsibilities

Requires coordination of trip reduction responsibilities between CMAs and the Air Districts.

Data collection responsibilities

Specifies Caltrans' responsibility for data collection and analysis on the State Highway System, unless the CMA designates that responsibility to another entity. The CMA may also assign data collection and analysis responsiblities to other owners and operators of facilities or services if such responsibilities are specified in its adopted program. The CMA is required to consult with Caltrans and other owners and operators in developing data collection and analysis procedures and schedules prior to adopting a program.

Monitored LOS and deficiency plans

Attempts to clarify the relationship between monitored levels of service and the evaluation o the violation of standards leading to the development of deficiency plans.

Multi-jurisdictional deficiency plans

Establishes multi-jurisdictional deficiency plans, including direction to CMAs to develop a methodology for determining if deficiency impacts are caused by more than one local jurisdiction, a conflict resolution process for multi-jurisdictional deficiency plans, and specifying local responsibilities.

Cross county trip generation facilities

Requires participation by a local jurisdiction that owns or is responsible for a trip generating facility that is in another county, upon request by the CMA where the facility is located.

Exclusions for deficiency plan purposes

Further defines high-density residential housing for the purpose of excluding impacts from deficiency planning responsibilities.

Demonstration project

Allows the study steering committee to designate at least two CMAs to participate in a demonstration study comparing multimodal performance standards to highway levels of service, requires that Caltrans make at least $50,000 available for each of the studies, and requires a report by 1999.

Date: April 9, 1993
W.I.: 902.10.01
W.A.: Res-2537.DOC/MTS Share
Referred By: WPC
Revised: 3/22/95-C

ABSTRACT

Resolution No. 2537

This resolution revises MTC's Guidance for Consistency of Congestion Management Programs with the Regional Transportation Plan.

This resolution supercedes Resolution No. 2166.

Date: April 9, 1993
W.I.: 902.10.01
W.A.: 1258r
Referred By: WPC

Re: Congestion Management Program Policy.

METROPOLITAN TRANSPORTATION COMMISSION

RESOLUTION NO. 2537

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Sections 66500 et seq; and

WHEREAS, Government Code § 65080 requires each transportation planning agency to prepare a regional transportation plan and a regional transportatic improvement program directed at the achievement of a coordinated and balancec regional transportation system; and

WHEREAS, Government Code § 65089 requires a designated local agency in each urbanized county to develop, adopt, and periodically update a congestior management program for the county and its included cities; and requires that this congestion management program be developed in consultation, among others with the regional transportation planning agency; and

WHEREAS, Government Code § 65089.2 requires that the regional transportation planning agency must make a finding that each congestion management program is consistent with the regional transportation plan, and upon making that finding shall incorporate the congestion management program into the regional transportation improvement program; and

WHEREAS, Government Code § 65082 requires that congestion management programs be incorporated into the regional transportation improvement progran approved by MTC; and

WHEREAS, MTC has adopted a Congestion Management Program Policy (MTC Resolution 2166) to provide guidance for all the counties and cities within the region in preparing their congestion management programs; and, WHEREAS, MTC's Congestion Management Program Policy needs to be updated from time to time to provide further guidance, now, therefore, be it

RESOLVED, that MTC adopts the Congestion Management Program Policy, as set forth in Attachments A and B to this resolution, which are incorporated herein by reference; and, be it further

RESOLVED, that this resolution shall be transmitted to the nine Bay Area counties and their included cities for use in preparing their congestion management programs.

METROPOLITAN TRANSPORTATION COMMISSION

Jane Baker

Jane Baker, Chairwoman

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on April 28, 1993.

Date: April 9, 1993
W.I.: 902.10.01
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Referred By: WPC
Revised: 3/22/95-C

Attachment A
Resolution No. 2537
Page 1 of 12

GUIDANCE FOR CONSISTENCY OF CONGESTION MANAGEMENT PROGRAMS WITH THE REGIONAL TRANSPORTATION PLAN

Metropolitan Transportation Commission

March 22, 1995

Date: April 9, 1993
W.I.: 902.10.01
W.A.: Res-2537.DOC/MTS Share
Referred By: WPC
Revised: 3/22/95-C

Attachment A
Resolution No. 2537
Page 2 of 12

GUIDANCE FOR CONSISTENCY OF CONGESTION MANAGEMENT PROGRAMS WITH THE REGIONAL TRANSPORTATION PLAN

TABLE OF CONTENTS

1. INTRODUCTION 3
  A. Purpose Of This Guidance 3
  B. Legislative Requirement for Congestion Management Programs 3
  C. The Role of CMPs in the Metropolitan Planning Process 4

II. MTC's ROLE and RESPONSIBILITIES 4
  A. MTC's Responsibilities regarding CMPs 4
  B. The Regional Transportation Plan (RTP) 5
  C. Consistency Findings 6
    1) Goals and objectives established in the RTP. 6
    2) Consistency of the system definition with adjoining counties. 7
    3) Consistency with pertinent Air Quality Plans, as incorporated in the RTP 7
    4) Consistency with the MTC Travel Demand Modeling Databases and Methodologies 8
    5) RTP Financial Requirements and Projections. 9
  D. Consistency and Compatibility of the Programs within the Region 9
  E. Incorporation of the CMP Projects into the RTIP 10

III. CMP PREPARATION AND SUBMITTAL TO MTC 11
  A. CMP Preparation 11
  B. Regional Coordination 11
  C. Submittal to MTC 11
  D. MTC Consistency Findings for CMPs 12

APPENDICES
  APPENDIX A Federal and State Transportation Control Measures
  APPENDIX B Checklist for Modeling Consistency for the 1995 CMPs
  APPENDIX C California Statutes of 1994, Chapter 1146 (AB 1963)

1. INTRODUCTION

A. Purpose Of This Guidance

The Congestion Management Program (CMP) statutes establish specific requirements for the content and development process for CMPs, for the relationship between CMPs and the metropolitan planning process, for CMA monitoring and other responsibilities, and for the responsibilities of MTC as the regional transportation agency.

CMP statutes also specify particular responsibilities involving CMPs for the regional transportation agency, in the Bay Area, MTC. These responsibilities include review of the consistency of the CMPs with the RTP, evaluation of the consistency and compatibility of the CMPs in the Bay Area, and inclusion of the CMP projects in the Regional Transportation Improvement Program (RTIP).

The purpose of this guidance is to focus on the relationship of the CMPs to the regional planning process and MTC's role in determining consistency of CMPs with the Regional Transportation Plan (RTP). (The CMP statutes are attached as Appendix C.)

B. Legislative Requirement for Congestion Management Programs

Congestion Management Programs were established as part of a bi-partisan legislative package in 1989, and approved by the voters in 1990. The legislation increased transportation revenues and changed state transportation planning and programming processes. The specific CMP provisions were originally chartered by the Katz-Kopp-Baker-Campbell Transportation Blueprint for the Twenty-First Century AB 471 (Katz); (Chapter 106, Statutes 1989) and AB 471 (Katz) (Chapter 106, Statutes of 1989). They were significantly revised by AB 1791 (Katz) (Chapter 16, Statutes of 1990), AB 3093 (Katz) (Chapter 2.6, Statutes of 1992), and AB 1963 (Katz) (Chapter 1146, Statutes of 1994).

CMP statutes establish specific mandatory requirements which must be satisfied in order for local jurisdictions to receive certain gas tax subvention funds. Additionally, CMPs play a mandated role in the development of specific project proposals for the Regional Transportation Improvement Program.

C. The Role of CMPs in the Metropolitan Planning Process

CMPs play a role in the countywide and regional transportation planning processes:

- CMPs can identify specific near term projects to implement the longer range vision established in a countywide plan.
- Through CMPs, the transportation investment priorities of the multiple jurisdictions in each county can be addressed in a countywide context.
- CMPs establish a link between local land use decision making and the transportation planning process.
- CMPs are a primary building block for the federally required Congestion Management System.

II. MTC's ROLE and RESPONSIBILITIES

A. MTC's Responsibilities regarding CMPs

MTC's direct responsibilities under CMP statutes are concentrated in the following provisions:

> *"The regional agency shall evaluate the consistency between the program (i.e., the CMP) and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.* (Section 65089.2 (a))
>
> *The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation*

improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program. (Section 65089.2(b))

It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas." (Section 65089.2.(d)(1))

B. The Regional Transportation Plan (RTP)

MTC is responsible for the RTP, which is the 20 year regional transportation policy and planning document for the region. The CMA may submit project proposals for consideration by MTC in developing future financially constrained RTPs. Legal requirements for the RTP are established by State law (Govt. Code Sec. 66500 et seq., & Sec. 65080) and Federal law (Title 23, U.S.C., Sec. 134 et. seq.). Under state law, the three elements of the RTP are:

- The **Policy Element,** which identifies the Commission's goals, policies and objectives.

- The **Financial Element,** which projects the operating and maintenance costs for the existing transportation system, and estimates reasonably assumed revenues for transportation over the next 20 years. Twenty year revenue estimates are developed for each Bay Area county.

- The **Action Element,** which outlines a financially constrained investment strategy for the continued maintenance and operation of the MTS, and defines certain strategic expansions for the system. The region's investment is specified for each county.

Under federal metropolitan planning requirements, the RTP must consider the 15 ISTEA planning factors, the ISTEA Management

Systems, federal and State air quality requirements, and the Americans with Disabilities Act.

C. Consistency Findings

MTC's findings for the consistency of CMPs focus on five areas:

- Goals and objectives established in the RTP,
- Consistency of the system definition with adjoining counties,
- Consistency with federal and state air quality plans,
- Consistency with the MTC travel demand modeling database and methodologies; and
- RTP financial assumptions.

1) Goals and objectives established in the RTP.

The 1994 RTP includes the following goals:

- Improve mobility for persons and freight:
  The ability to move with a reasonable degree of ease and predictability on a Metropolitan Transportation System (MTS) in the Bay Area is key to the region's economy and quality of life. The MTS should be the focus of the many partner agencies who operate it.

- Promote equity for system users:
  Equitable access to the region's transportation system, and the decision-making process that governs it, should be provided for all persons.

- Enhance sensitivity to the environment
  The environmental impact, both short and long-term, of transportation decisions should be fully analyzed and considered, and adverse impacts mitigated whenever possible.

- Support economic vitality of the region
  The relationship between a productive regional economy and the ability of the transportation infrastructure to move

individuals, commodities, and information should be recognized and reinforced.

- Support community vitality of the region
  Transportation improvements should be used to help create more livable communities and enhance the Bay Area quality of life.

2) Consistency of the system definition with adjoining counties.

The CMP statutes require that the CMA designate a system of highways and roadways which shall be subject to the CMP requirements. Consistency requires the regional continuity of the CMP designated system for facilities that cross county borders. MTC's consistency review will be guided by those elements of the CMP system that are also part of the Metropolitan Transportation System (MTS), as established in the most recent RTP.

3) Consistency with pertinent Air Quality Plans, as incorporated in the RTP.

The RTP incorporates Transportation Control Measures (TCMs) contained in the federal and state air quality plans to achieve and maintain the respective standards for ozone and carbon monoxide. The statutes require that the Capital Improvement Program (CIP) of the CMP conform to transportation related vehicle emission air quality mitigation measures. CMPs should promote the region's adopted transportation control measures (TCMs) for the Federal and State Clean Air Plans.

- A list of federal and state TCMs is provided in Table 1 of Attachment A (for more detailed descriptions see Volume III of the most current Transportation Improvement Program and the 1994 Clean Air Plan).

- In particular, TCMs that require local implementation should be identified in the CMP, specifically in the CIP. If needed MTC will indicate TCMs that need to be emphasized to help achieve federal and state air quality standards.

4) Consistency with the MTC Travel Demand Modeling Databases and Methodologies

> *The agency, (i.e., the CMA) in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model . . . The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency.* (Section 65089 (c))

MTC desires the development of highly consistent travel demand models, with coordinated regional and subregional models and shared databases, to provide a common foundation for transportation policy and investment analysis.

The Modeling Coordination Subcommittee of the Bay Area Partnership is currently evaluating possible approaches towards improving modeling consistency regionwide. Specific issues include the ability to compare and combine information from regional/county and county/county analyses, use of forecasting data for multiple purposes, and the recurring need to update the models. Additionally, the Subcommittee will continue to serve as a forum for sharing data and expertise, and providing peer review for issues involving the models developed by or for the CMAs, MTC, and other parties.

For the 1995 CMPs, the MTC Checklist for Modeling Consistency for the 1995 CMPs will be used to guide the consistency assessment of the CMA models with the MTC model. This Modeling Checklist was reviewed and recommended by the Modeling Coordination Subcommittee and the Plans and Programs Committee.

The Checklist is included as Attachment B, and addresses:

- Demographic/econometric forecasts
- Pricing assumptions
- Network assumptions
- Auto ownership assumptions
- Trip generation methodology
- Trip distribution methodology
- Mode choice methodology
- Traffic assignment methodologies

5) RTP Financial Requirements and Projections.

Under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the actions, programs and projects in the RTP must be financially deliverable within reasonable estimates of public and private resources. While CMPs are not required by legislation to be financially constrained, recognition of financial constraints, including the costs for maintaining and operating the existing multi-modal system and the status of specific major projects, will strengthen the consistency and linkage between the regional planning process and the CMP.

D. Consistency and Compatibility of the Programs within the Region

The legislation requires that, in the case of a multi-county regional transportation agency, that agency shall evaluate the consistency and compatibility of the congestion management programs within the region. Further, it is the Legislature's stated intention that the regional agency (i.e., MTC) resolve inconsistencies and mediate disputes between congestion management programs within a region.

To the extent useful and necessary, MTC will identify differences in methodologies and approaches between the CMPs on such issues as performance measures and land use impacts.

E. Incorporation of the CMP Projects into the RTIP

MTC is responsible for the RTIP, which is developed with input from the Bay Area Partnership. The RTIP is a seven year proposal of specific projects, developed for specific fund sources and programs. The RTIP is the regional proposal for State and federal funding, adopted by MTC and provided to the California Transportation Commission (CTC) for the development of the State Transportation Improvement Program (STIP). The RTIP is required to be consistent with the RTP which is currently in effect. The RTP is revised periodically.

The CMP statutes establish a direct linkage between CMPs that have been found to be consistent with the RTP, and the RTIP. MTC will review the projects in the CIP for consistency with the RTP. MTC's consistency findings for projects in the CMPs will be limited to those projects that are included in the RTP, and do not extend to other projects that may be included in the CMP. Some projects may be found consistent with a program category in the RTP. MTC, upon finding that the CMP is consistent with the RTP, shall incorporate the program into the RTIP, subject to specific programming and funding requirements. If MTC finds the program inconsistent, it may exclude any project in the program from inclusion in the RTIP. Since the RTIP must be consistent with the RTP, projects that are not consistent with the RTP will not be included in the RTIP. MTC may include certain projects or programs in the RTIP which are not in a CIP, but which are in the RTP.

MTC's multimodal priority setting process is currently specified in MTC's Resolution No. 2526, revised. This process includes procedures for the screening, scoring, and programming of projects, and an updated process will be available for the development of the 1995 RTIP.

MTC will establish county "bid" targets for specific funds, based upon the fund estimate as adopted by the CTC. Project proposals can only be included in the RTIP within these funding bid targets. MTC will also provide information on other relevant RTIP processes and requirements, including coordination between city, county, and transit districts for project applications, schedule, evaluations and recommendations of project submittals, as appropriate for the 1995 RTIP.

III. CMP PREPARATION AND SUBMITTAL TO MTC

A. CMP Preparation

The CMP shall be developed by the CMA in consultation with, and with the cooperation of, MTC, transportation providers, local governments, Caltrans, and the BAAQMD, and adopted at a noticed public hearing of the CMA.

CMPs are required to be adopted biennially, consistent with the schedule for updating and adopting the RTIP. The RTIP is scheduled to be adopted every other year. If circumstances arise that change this schedule, MTC will work with the CMAs in determining an appropriate schedule.

B. Regional Coordination

In addition to program development and coordination at the county level, and consistency with the RTP, the compatibility of the CMPs with other Bay Area CMPs would be enhanced through identification of cross county issues in an appropriate forum, such as Partnership and other appropriate policy and technical committees. Discussions would be most beneficial if done prior to final CMA actions on the CMP.

C. Submittal to MTC

To provide adequate review time, draft CMPs should be submitted to MTC by the end of June on each odd year, including 1995, in order to allow for incorporation into the RTIP for the December submittal to the California Transportation Commission. Final CMPs must be adopted prior to MTC consistency findings, to be made in November. MTC will provide a revised schedule in case of changes.

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D. MTC Consistency Findings for CMPs

MTC will evaluate of consistency of the CMP every two years with the RTP that is in effect when the CMP is submitted. MTC will evaluate the consistency of draft CMPs when received, based upon the areas specified in this guidance, and will provide staff comments of any significant concerns. MTC can only make final consistency findings on CMPs that have been officially adopted. Consistency findings are scheduled to be recommended by the Work Program Committee and adopted by the Commission in November, 1995.

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Appendix A: Federal and State Transportation Control Measures

Table A-1: Transportation Control Measures From the 1982 Federal Air Quality Plan for the Bay Area

	FEDERAL TCMs	DESCRIPTION
TCM 1	Reaffirm commitment to 28% transit ridership increase between 1978 and 1983.	Increase transit ridership according to the transit operator's five-year plans.
TCM 2	Support post-1983 improvements identified in the operator's five-year plans, and, after consultation with the operators, adopt ridership increase target for the period 1983 through 1987.	A target for this TCM was to increase ridership by 15% between 1982/83 and 1987/88.
TCM 3	Seek to expand and improve public transit beyond committed levels.	This TCM is to upgrade and expand transit service between the years 1982/83 and 1987/88. The target was to increase the combined fleet size by 15% during this period.
TCM 4	Continue to support development of High Occupancy Vehicle (HOV) lanes.	Implement HOV lanes where justified on a case-by-case basis; also includes highway ramp meters with HOV bypass lanes.
TCM 5	Continues to support RIDES efforts.	Support for RIDES efforts in regionwide commuter matching services, vanpooling and employer services designed to encourage employees to participate in ridesharing activities.
TCM 6	Continue efforts to obtain funding to support long-range transit improvements.	Covers the funding and implementation of the Guadalupe light-rail transit in Santa Clara County and BART extensions to North Concord and Warm Springs (in Fremont).
TCM 7	Reaffirm commitment to preferential parking program.	Support the development of park-and-ride lots, where commuters can leave their cars and complete trips by other modes.
TCM 8	Encourage transit operators to work with Caltrans to identify underutilized lots along major transit lines that could be used as park-and-ride lots.	Applies to Caltrans' joint use park-and-ride program to establish lots in existing private parking areas.

continued ...

(Cont'd.)

Table A-1: Transportation Control Measures From the 1982 Federal Air Quality Plan for the Bay Area

	FEDERAL TCMs	DESCRIPTION
TCM 9	Expand Commute Alternatives Program.	Encourages employers to promote alternatives to commuting in the single-occupant vehicle. Includes funding to conduct employer transportation coordinator training classes, market ridesharing to the media and employers, and outreach programs to employers.
TCM 10	Develop Information Program for Local Governments	This TCM consists of providing information to local governments and developers detailing the role of local governments in addressing commute transportation and providing technical assistance.
TCM 11	Gasoline Conservation and Awareness Program (GasCap)	The GasCap program was funded by the California Energy Commission, sponsored by Caltrans and administered by the West Valley College. It entailed a training program oriented towards large vehicle fleets to teach proper driving techniques, vehicle maintenance and trip planning. It was discontinued in 1984. The California Energy Commission is continuing a GasCap type program by training large public agency fleet managers in methods to reduce fuel consumption.
TCM 12	Santa Clara Commuter Transportation Program	This TCM consists of the commuter program adopted by Santa Clara County in 1982. It consists of a ridesharing program, express bus service, park-and-ride lots, upgrading Southern Pacific (CalTrain) service and HOV lanes

Federal Air Quality
Contingency Transportation Control Measures

TCM 13	Increase bridge tolls to $1.00 on all bridges.	Would raise tolls to $1.00 on the Antioch, Bay, Benicia and Carquinez bridges.
TCM 14	Bay Bridge surcharge of $1.00	Increase Bay Bridge toll to $2.00 to discourage single occupant automobile use and improve transit.
TCM 15	Increase state gas tax by 9 cents	Raise State gasoline taxes from 9 cents to 18 cents per gallon. This measure takes credit for emission reductions due to a full 9 cent increase, phased in by 1995.

(Cont'd.)

Table A-1: Federal Air Quality Contingency Transportation Control Measures

	FEDERAL TCMs	DESCRIPTION
TCM 16	Implement MTC Resolution No. 1876, Revised—New Rail Starts Agreement	Complete the $3.5 billion, 6 rail extension program by securing State and Federal funds for program. Only takes credit for emission reduction from a future BART extension to Colma.
TCM 17	Continue post-earthquake transit service	Continuation of ferry service initiated after the October 1989 earthquake and the expanded BART peak period service.
TCM 18	Sacramento-Bay Area Amtrak service	Implement near-term improvements recommended in ACR 132 Rail Study. Assumes three trains in each direction between Sacramento and the Bay Area.
TCM 19	Upgrade CalTrain service	Increase service frequency to 66 trains per day. Extend service to Gilroy.
TCM 20	Regional High Occupancy Vehicle (HOV) Lane System Plan	Expand and improve HOV concept first proposed in TCM 4 by developing and implementing the HOV Lane Master Plan. Includes 221 directional miles of HOV lanes.
TCM 21	Regional Transit Coordination	Includes multiple coordination initiatives: fare coordination, service coordination.
TCM 22	Expand Regional Transit Connection (RTC) ticket distribution	Expand on-going MTC program to provide a regional clearinghouse for sale of transit tickets to employers; encourage employers to subsidize tickets.
TCM 23	Employer audits	Development of a program to review the TSM programs of selected employers in the region and to suggest actions to enhance programs. Will target specific large or mid-size employers and small employers for improved commute alternatives program.
TCM 24	Expand signal timing program to new cities	Establishes a program to provide technical assistance to cities in the form of traffic monitoring, design of signal timing plans, and hardware improvements.
TCM 25	Maintain existing signal timing programs for local streets	Involves the provision of technical assistance to cities for periodic program adjustments and coordination with adjacent cities.
TCM 26	Incident management on Bay Area freeways	Incident management is part of Caltrans' Traffic Operations Systems (TOS). Assumes emission reductions from the initial phases of TOS on the approaches to the Bay Bridge.

(Cont'd.)
Table A-1: Federal Air Quality
Contingency Transportation Control Measures

	FEDERAL TCMs	DESCRIPTION
TCM 27	Update MTC guidance on development of local TSM programs	MTC report "Key Considerations for Developing Local Government TSM Programs" (December 1988) contains guidance on developing TSM programs and would be updated.
TCM 28	Local Transportation Systems Management (TSM) initiatives	This TCM accounts for effects of new initiatives, such as Golden Triangle Task Force and Contra Costa County Growth Management Program.

Table A-2: Transportation Control Measures Adopted by the Bay Area Air Quality Management District as part of the Bay Area Clean Air Plan to Meet the California Clean Air Act

	STATE TCMs	DESCRIPTION
TCM 1	Expand employer assistance programs	Assist with training employee transportation coordinators and city/county transportation demand management coordinators; with starting-up transportation management associations; and with telecommuting programs, employee commute surveys, vanpool programs.
TCM 2	Adopt employer-based trip reduction rule	BAAQMD to implement regional employer-based trip reduction rule.
TCM 3	Improve areawide transit service	Increase local bus service; continue post-earthquake increase in BART service; expand rail service; upgrade CalTrain service.
TCM 4	Expedite and expand regional rail agreement	Based on MTC Resolution No. 1876, revised.
TCM 5	Improve access to rail and ferry transit stations	Improve feeder bus service and bicycle access; at transit stations add parking and encourage preferential parking for electric vehicles; add private shuttles from transit stations to employment centers.
TCM 6	Improve intercity rail service	Implement new intercity rail service in Auburn-Sacramento-Oakland-San Jose corridor
TCM 7	Improve ferry service	Per MTC Regional Ferry Plan.
TCM 8	Construct carpool/express bus lanes on freeways,	Based on "2005 HOV Master Plan".
TCM 9	Improve bicycle access and facilities	Maintain Bicycle Advisory Committees and comprehensive bicycle plans; encourage bicycles on transit vehicles and on all bridges; encourage employers and developers to provide bicycle access and facilities.
TCM 10	Youth transportation	Allocate funds for discount youth transit tickets; encourage carpooling among students; convert school buses to clean-fuel vehicles.
TCM 11	Install freeway Traffic Operations System (TOS)	Implement TOS, which includes traffic surveillance, traffic advisory signs, incident management, ramp metering; develop automated electronic toll collection facilities.

(Cont'd.)

Table A-2: Transportation Control Measures Adopted by the Bay Area Air Quality Management District as part of the Bay Area Clean Air Plan to Meet the California Clean Air Act

	STATE TCMs	DESCRIPTION
TCM 12	Improve arterial traffic management	Expand local signal timing programs for cities; study signal pre-emption for buses. Develop MTS Management Strategy. Improve arterials for buses and bicycles.
TCM 13	Transit use incentives	Improve coordination between transit operators regarding routes, schedules, transfers, fares; expand distribution of transit passes and tickets; consider fare reductions on off-peak.
TCM 14	Improve Rideshare/Vanpool Services and Incentives	Enhance ridesharing marketing services and provide incentives to vanpool and carpool. Examine opportunities to reduce vanpool vehicle acquisition and operation costs.
TCM 15	Local Clean Air Plans, Policies and Programs	Encourage cities and counties to incorporate air quality beneficial policies and programs into local planning and development activities, with a particular focus on subdivision, zoning and site design measures that reduce the number and length of single-occupant automobile trips.
TCM 16	Intermittent Control Measure/Public Education	Encourage public to reduce motor vehicle use on days of predicted ozone exceedances through "Spare the Air" program. Continue public education program to inform Bay Area residents about status of regional air quality, health effects of air pollution, sources of pollution, and measures that individuals and communities can take to help improve air quality.
TCM 17	Conduct Demonstration Projects	Promote demonstration projects to develop new strategies to reduce motor vehicle emissions. Potential projects will include telecommuting and electronic toll collection.
TCM 18	Implement Revenue Measures	Develop revenue measures needed to fund implementation of mobility improvement and user incentives: - Regional gas tax of $.10 - Continuation of CMAQ - Convert State Transit Capital Improvement (TCI) Program into a formula program.

Table A-2: Transportation Control Measures Adopted by the Bay Area Air Quality Management District as part of the Bay Area Clean Air Plan to Meet the California Clean Air Act

	STATE TCMs	DESCRIPTION
TCM 19	Implement Market Based Pricing Measures	Measures would be based on: - "Smog Fee": vehicle registration fee based on emissions and miles driven. - Gas Tax increase - Consider expanding congestion pricing upon successful completion of Bay Bridge congestion pricing demonstration project - Encourage expansion of parking cash-out programs. Use revenues for transportation alternatives and equity programs.

Appendix B: MTC Checklist for Modeling Consistency for the 1995 CMPs

MTC's goal is to establish a regionally consistent model "set" for application by MTC and the CMAs. This Checklist is intended to guide the CMAs through their model development and consistency certification process by providing an inventory of specific products to be developed and submitted to MTC, and by describing standard practices and assumptions to be followed. The Modeling Coordination Subcommittee may propose enhancements to this Checklist, such as the definition of specific numeric tolerances for model inputs and outputs, as necessary, to give the CMAs the ability to develop models that are readily certifiable, to provide the CMAs the ability to assess their own models, or at least some of their model components, and to improve the quality and consistency of the modeling processes in the region. Because of the complexity of the topic, the Checklist may need to be complemented by additional detailed information to explain differences in methodological approach or data. Significant differences will be resolved between MTC and the CMA, taking advantage of the Modeling Coordination Subcommittee and its peer review process. Additionally, the Modeling Coordination Subcommittee may explore development of a test for significant differences in demographic forecasts and their impact on travel forecasts as a basis for modifying the schedule for required updates.

A. Discuss the General Approach to Travel Demand Modeling by the CMA

Describe the model, and its relationship to the MTC model. If the model is based on MTC's model, describe any adjustments to model constants, coefficients, k-factor or friction factor re-estimation, market segmentation, and trip purposes, etc.

PRODUCT 1: Description of the above.

B. Demographic/Economic/Land Use Forecasts:

Use exact ABAG Projections for other Bay Area counties, and control totals (within 1 percent) for the county for population, households, jobs and employed residents. CMAs may reallocate growth forecasts within their own county in consultation with cities, MTC and ABAG. Projections 94 must be used for all new demographic databases developed for baseline travel demand forecasting purposes after August 1, 1994. CMAs may also, of course, analyze alternative land use scenarios in addition to these forecasts. If a land use based model is utilized, production and attraction comparisons will be made with the MTC model.

PRODUCT 2: Summary sheet comparing ABAG Projections economic and demographic data (cite reference) and CMP input data for population, households, jobs and employed residents for the 9 Bay Area counties for the base and forecast years (Year 2000 data must be included), and a statement establishing that the differences between the ABAG variables and those of the CMA input file do not exceed 1 percent at the county level for your county, and that no differences exist for the other 8 counties for a base case scenario.

C. Pricing Assumptions:

Use MTC's auto operating costs, transit fares, and bridge tolls.

PRODUCT 3: Statements establishing satisfaction of the above.

D. Network Assumptions:

Use MTC's regional highway and transit network assumptions for other Bay Area counties. CMAs may include more detailed network definition within their own county in addition to the regional highway and transit networks. For the Year 2000 the base case scenario, against which other scenarios will be compared, shall be limited to the approved Transportation Improvement Program (TIP).

PRODUCT 4: Statement establishing satisfaction of the above.

E. Auto Ownership Assumptions:

Use MTC auto ownership models or forecasts, or submit alternative models to MTC for review and comment.

PRODUCT 5: County and district level table(s) showing households by vehicle ownership level (0, 1, 2+ vehicle/household), and autos per household summaries at county and district levels, or autos per worker and total autos by district, and other pertinent auto ownership data if more appropriate. (Note that the term "district" used in these Guidelines may be interpreted as either MTC superdistricts or CMA defined districts.)

F. Trip Generation:

Use the regional person trip generation models for home-based work and non-work, and non-home based trips, or submit alternative models to MTC for review and comment. Results may be adjusted sub-regionally through calibration or modal constant adjustments.

PRODUCTS:

6) County and district level table(s) summarizing trip productions and trip attractions out of the trip generation model.
7) Trip rate analysis, including home-based work trips per employed resident, home-based non-work trips per household, and non-home-based trips per total job.
8) Description of sub-regional adjustment factors, if any.

G. Trip Distribution:

Work trip distribution models must be calibrated to the 1980 or 1990 Census Journey-to-Work commuter matrices. 1990 data should be used for all new forecasting databases developed for baseline travel demand forecasting purposes after August, 1994. Trip distribution results must be balanced to productions, and attraction balancing problems should be discussed with MTC.

PRODUCTS:

9) County and district level table(s) showing attraction balancing analysis, i.e., comparison of "modeled" attractions from the trip distribution model to "desired" attractions from the trip generation (trip attraction) models.
10) County-to-county level trip tables.
11) District-to-district level trip tables for intra-county trips.

All trip distribution analyses are to be stratified by trip purpose.

H. Mode Choice:

If a logit mode choice model is to be used, MTC's "SW" or "TW" for work trips, and MTC's mode choice models for home-based shop, home-based social recreational and non-home-based trip purposes should be used, or submit alternative methodology for MTC review.

PRODUCTS:

12) County-to-county and district-to-district (intra-county) level table(s) showing mode choice forecasts by trip purpose and travel mode. There is no need to document the county-to-county mode choice forecasts for trips that do not start, end, or pass through the particular county of interest.
13) Vehicle trip tables, county-to-county and intra-county district-to-district, stratified by trip purpose.

I. Traffic Assignment:

Use capacity restraint assignment for peak hour traffic assignments, or submit alternative methodology for MTC review.

PRODUCTS:

14) Description of trip assignment methodology for daily and/or peak hour (period) assignments for both transit and highway.
15) Describe peaking factors and vehicle occupancy assumptions utilized.
16) Observed and assigned volumes at specified locations may be provided as supporting material in order to assist in analyzing base year validations, and to analyze the adequacy of the model outputs for purposes of individual project carbon monoxide analyses.

Alternatively, CMAs may elect to utilize MTC zone to zone person/vehicle trip tables, adding network and zonal details within the county as appropriate, and then re-run the assignment. In this case, only Products 14 and 15 are applicable if vehicle trip tables are utilized, and additionally Products 12 and 13 if person trip tables are utilized.

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Appendix C

California Statutes of 1994

Assembly Bill No. 1963

CHAPTER 1146

An act to amend Sections 65088.1, 65089, and 65089.2 of, to amend and renumber Sections 65089.4, 65089.5, 65089.6, and 65089.7 of, to add Sections 65089.3, 65089.4, and 65089.9 to, and to repeal Section 65089.3 of, the Government Code, relating to transportation.

[Approved by Governor September 29, 1994. Filed with Secretary of State September 30, 1994.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1963, Katz. Transportation: congestion management programs.

(1) Existing law requires the development, adoption, and updating of a congestion management program for each county that includes an urbanized area, as defined. The plan is required to contain specified elements and to be submitted to regional agencies, as defined, for determination of whether the program is consistent with regional transportation plans. The regional agency is then directed to monitor the implementation of all elements of each congestion management program.

This bill would revise various definitions and program elements and incorporate new definitions and program elements for purposes of the above. The bill would also revise the duties of the regional agency with respect to monitoring the programs and would require the Department of Transportation to collect and analyze state highway data, unless the local regional agency designates that responsibility to another entity. The bill would also revise the duties of cities and counties that are subject to the provisions, thereby imposing a state-mandated local program.

The bill would authorize the department to undertake a demonstration study comparing multimodal performance standards to highway level of service standards and provide for a June 30, 1997, report to the Legislature regarding that study.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates which do not exceed $1,000,000 statewide and other procedures for claims whose statewide costs exceed $1,000,000.

This bill would provide that, if the Commission on State Mandates determines that this bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to those statutory procedures and, if the statewide cost does not exceed $1,000,000, shall be made from the State Mandates Claims Fund.

The people of the State of California do enact as follows:

SECTION 1. Section 65088.1 of the Government Code is amended to read:

65088.1. As used in this chapter the following terms have the following meanings:

(a) Unless the context requires otherwise, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

(b) Unless the context requires otherwise, "agency" means the agency responsible for the preparation and adoption of the congestion management program.

(c) "Commission" means the California Transportation Commission.

(d) "Department" means the Department of Transportation.

(e) "Local jurisdiction" means a city, a county, or a city and county.

(f) "Parking cash-out program" means an employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. "Parking subsidy" means the difference between the out-of-pocket amount paid by an employer on a regular basis in order to secure the availability of an employee parking space not owned by the employer and the price, if any, charged to an employee for use of that space.

A parking cash-out program may include a requirement that employee participants certify that they will comply with guidelines established by the employer designed to avoid neighborhood parking problems, with a provision that employees not complying with the guidelines will no longer be eligible for the parking cash-out program.

(g) "Urbanized area" has the same meaning as is defined in the 1990 federal census for urbanized areas of more than 50,000 population.

(h) "Interregional travel" means any trips that originate outside the boundary of the agency. A "trip" means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. A roundtrip consists of two individual trips.

(i) "Multimodal" means the utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized and demand management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies varies by county and region in accordance with the size and complexity of different urbanized areas.

(j) "Level of service standard" is a threshold that defines a deficiency on the congestion management program highway and roadway system which requires the preparation of a deficiency plan. It is the intent of the Legislature that the agency shall use all elements of the program to implement strategies and actions that avoid the creation of deficiencies and to improve multimodal mobility.

(k) "Performance measure" is an analytical planning tool that is used to quantitatively evaluate transportation improvements and to assist in determining effective implementation actions, considering all modes and strategies. Use of a performance measure as part of the program does not trigger the requirement for the preparation of deficiency plans.

SEC. 2. Section 65089 of the Government Code is amended to read:

65089. (a) A congestion management program shall be developed, adopted, and updated biennially, consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department, and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The highway and roadway system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be designated as part of the system. Level of service (LOS) shall be measured by Circular 212, (or by the most recent version of the Highway Capacity Manual), or by a uniform methodology adopted by the agency which is consistent with the Highway Capacity Manual. The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department shall make this determination instead if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A. When the level of service on a segment or at an intersection fails to attain the established level of service standard, a deficiency plan shall be adopted pursuant to Section 65089.4.

(2) A performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance measures shall incorporate highway and roadway system performance, and measures established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators. These performance measures shall support mobility, air quality, land use, and economic objectives, and shall be used in the development of the capital improvement program required pursuant to paragraph (5), deficiency plans required pursuant to Section 65089.4, and the land use analysis program required pursuant to paragraph (4).

(3) (A) A trip reduction and travel demand element that promotes alternative transportation methods, including, but not limited to, carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including, but not limited to, flexible work hours, telecommuting, and parking management programs. The agency shall consider parking cash-out programs during the development and update of the trip reduction and travel demand element.

(B) The agency and respective air pollution control district or air quality management district shall coordinate the development of trip reduction responsibilities and shall avoid duplication of responsibilities between agencies. A multiple site employer, as specified in paragraph (4) of subdivision (e) of Section 40717 of the Health and Safety Code, shall have the option of complying with a district employer trip reduction rule, or a similar rule proposed pursuant to a federal implementation plan, and reporting directly to the district or a responsible federal or state agency. A multiple site employer that exercises this option shall be exempt from any employer-based trip reduction requirement imposed pursuant to the trip reduction and travel demand element.

(C) Except for paragraph (B), nothing in this section prevents a local jurisdiction from adopting transportation demand management measures that include or exceed the requirements established by the agency or by the air pollution control district or air quality management district.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. This program shall measure, to the extent possible, the impact to the transportation system using the performance measures described in paragraph (2). In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private contributions to improvements to regional transportation systems.

However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the amount of the credit to be provided. The program defined under this section may require implementation through the requirements and analysis of the California Environmental Quality Act, in order to avoid duplication.

(5) A seven-year capital improvement program, developed using the performance measures described in paragraph (2) to determine effective projects that maintain or improve the performance of the multimodal system for the movement of people and goods, to mitigate regional transportation impacts identified pursuant to paragraph (4). The program shall conform to transportation-related vehicle emission air quality mitigation measures, and include any project that will increase the capacity of the multimodal system. It is the intent of the Legislature that, when roadway projects are identified in the program, consideration be given for maintaining bicycle access and safety at a level comparable to that which existed prior to the improvement or alternation. The capital improvement program may also include safety, maintenance, and rehabilitation projects that do not enhance the capacity of the system but are necessary to preserve the investment in existing facilities.

(c) The agency, in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency.

(d) (1) The city or county in which a commercial development will implement a parking cash-out program which is included in a congestion management program pursuant to subdivision (b), or in a deficiency plan pursuant to Section 65089.4, shall grant to that development an appropriate reduction in the parking requirements otherwise in effect for new commercial development.

(2) At the request of an existing commercial development that has implemented a parking cash-out program, the city or county shall grant an appropriate reduction in the parking requirements otherwise applicable based on the demonstrated reduced need for parking, and the space no longer needed for parking purposes may be used for other appropriate purposes.

(e) Pursuant to the federal Intermodal Surface Transportation Efficiency Act of 1991 and regulations adopted pursuant to the act, the department shall submit a request to the Federal Highway Administration Division Administrator to accept the congestion management program in lieu of development of a new congestion management system otherwise required by the act.

SEC. 3. Section 65089.2 of the Government Code is amended to read:

65089.2. (a) Congestion management programs shall be submitted to the regional agency. The regional agency shall evaluate the consistency between the program and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.

(b) The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program.

(c) (1) The regional agency shall not program any surface transportation program funds and congestion mitigation and air quality funds pursuant to Section 182.6 and 182.7 of the Streets and Highways Code in a county unless a congestion management program has been adopted by December 31, 1992, as required pursuant to Section 65089. No surface transportation program funds or congestion mitigation and air quality funds shall be programmed for a project in a local jurisdiction that has been found to be in nonconformance with a congestion management program pursuant to Section 65089.5 unless the agency finds that the project is of regional significance.

(2) Notwithstanding any other provision of law, upon the designation of an urbanized area, pursuant to the 1990 federal census or a subsequent federal census, within a county which previously did not include an urbanized area, a congestion management program as required pursuant to Section 65089 shall be adopted within a period of 18 months after designation by the Governor.

(d) (1) It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas.

(2) It is the further intent of the Legislature that disputes which may arise between regional agencies, or agencies which are not within the boundaries of a multicounty regional transportation planning agency, should be mediated and resolved by the Secretary of Business, [illegible]sing and Transportation Agency, or an employee of that agency designated by the secretary, in consultation with the air pollution control district or air quality management district within whose boundaries the regional agency or agencies are located.

(e) At the request of the agency, a local jurisdiction that owns, or is responsible for operation of, a trip-generating facility in another county shall participate in the congestion management program of the county where the facility is located. If a dispute arises involving a local jurisdiction, the agency may request the regional agency to mediate the dispute through procedures pursuant to subdivision (d) of Section 65089.2. Failure to resolve the dispute does not invalidate the congestion management program.

SEC. 4. Section 65089.3 of the Government Code is repealed.

SEC. 5. Section 65089.3 is added to the Government Code, to read:

65089.3. The agency shall monitor the implementation of all elements of the congestion management program. The department is responsible for data collection and analysis on state highways, unless the agency designates that responsibility to another entity. The agency may also assign data collection and analysis responsibilities to other owners and operators of facilities or services if the responsibilities are specified in its adopted program. The agency shall consult with the department and other affected owners and operators in developing data collection and analysis procedures and schedules prior to program adoption. At least biennially, the agency shall determine if the county and cities are conforming to the congestion management program, including, but not limited to, all of the following:

(a) Consistency with levels of service standards, except as provided in Section 65089.4.

(b) Adoption and implementation of a trip reduction and travel demand ordinance.

(c) Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

(d) Adoption and implementation of a deficiency plan pursuant to Section 65089.4 when highway and roadway level of service standards are not maintained on portions of the designated system.

SEC. 6. Section 65089.4 of the Government Code is amended and renumbered to read:

65089.5. (a) If, pursuant to the monitoring provided for in Section 65089.3, the agency determines, following a noticed public hearing, that a city or county is not conforming with the requirements of the congestion management program, the agency shall notify the city or county in writing of the specific areas of nonconformance. If, within 90 days of the receipt of the written notice of nonconformance, the city or county has not come into conformance with the congestion management program, the governing body of the agency shall make a finding of nonconformance and shall submit the finding to the commission and to the Controller.

(b) (1) Upon receiving notice from the agency of nonconformance, the Controller shall withhold apportionments of funds required to be apportioned to that nonconforming city or county by Section 2105 of the Streets and Highways Code.

(2) If, within the 12-month period following the receipt of a notice of nonconformance, the Controller is notified by the agency that the city or county is in conformance, the Controller shall allocate the apportionments withheld pursuant to this section to the city or county.

(3) If the Controller is not notified by the agency that the city or county is in conformance pursuant to paragraph (2), the Controller shall allocate the apportionments withheld pursuant to this section to the agency.

(c) The agency shall use funds apportioned under this section for projects of regional significance which are included in the capital improvement program required by paragraph (5) of subdivision (b) of Section 65089, or in a deficiency plan which has been adopted by the agency. The agency shall not use these funds for administration or planning purposes.

SEC. 7. Section 65089.4 is added to the Government Code, to read:

65089.4. (a) A local jurisdiction shall prepare a deficiency plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The deficiency plan shall be adopted by the city or county at a noticed public hearing.

(b) The agency shall calculate the impacts subject to exclusion pursuant to subdivision (f) of this section, after consultation with the regional agency, the department, and the local air quality management district or air pollution control district. If the calculated traffic level of service following exclusion of these impacts is consistent with the level of service standard, the agency shall make a finding at a publicly noticed meeting that no deficiency plan is required and so notify the affected local jurisdiction.

(c) The agency shall be responsible for preparing and adopting procedures for local deficiency plan development and implementation responsibilities, consistent with the requirements of this section. The deficiency plan shall include all of the following:

(1) An analysis of the cause of the deficiency. This analysis shall include the following:

(A) Identification of the cause of the deficiency.

(B) Identification of the impacts of those local jurisdictions within the jurisdiction of the agency that contribute to the deficiency. These impacts shall be identified only if the calculated traffic level of service following exclusion of impacts pursuant to subdivision (f) indicates that the level of service standard has not been maintained, and shall be limited to impacts not subject to exclusion.

(2) A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.

(3) A list of improvements, programs, or actions, and estimates of costs, that will (A) measurably improve multimodal performance, using measures defined in paragraphs (1) and (2) of subdivision (b) of Section 65089, and (B) contribute to significant improvements in air quality, such as improved public transit service and facilities, improved nonmotorized transportation facilities, high occupancy vehicle facilities, parking cash-out programs, and transportation control measures. The air quality management district or the air pollution control district shall establish and periodically revise a list of approved improvements, programs, and actions that meet the scope of this paragraph. If an improvement, program, or action on the approved list has not been fully implemented, it shall be deemed to contribute to significant improvements in air quality. If an improvement, program, or action is not on the approved list, it shall not be implemented unless approved by the local air quality management district or air pollution control district.

(4) An action plan, consistent with the provisions of Chapter 5 (commencing with Section 66000), that shall be implemented, consisting of improvements identified in paragraph (2), or improvements, programs, or actions identified in paragraph (3), that are found by the agency to be in the interest of the public health, safety, and welfare. The action plan shall include a specific implementation schedule. The action plan shall include implementation strategies for those jurisdictions that have contributed to the cause of the deficiency in accordance with the agency's deficiency plan procedures. The action plan need not mitigate the impacts of any exclusions identified in subdivision (f). Action plan strategies shall identify the most effective implementation strategies for improving current and future system performance.

(d) A local jurisdiction shall forward its adopted deficiency plan to the agency within 12 months of the identification of a deficiency. The agency shall hold a noticed public hearing within 60 days of receiving the deficiency plan. Following that hearing, the agency shall either accept or reject the deficiency plan in its entirety, but the agency may not modify the deficiency plan. If the agency rejects the plan, it shall notify the local jurisdiction of the reasons for that rejection, and the local jurisdiction shall submit a revised plan within 90 days addressing the agency's concerns. Failure of a local jurisdiction to comply with the schedule and requirements of this section shall be considered to be nonconformance for the purposes of Section 65089.5.

(e) The agency shall incorporate into its deficiency plan procedures, a methodology for determining if deficiency impacts are caused by more than one local jurisdiction within the boundaries of the agency.

(1) If, according to the agency's methodology, it is determined that more than one local jurisdiction is responsible for causing a deficient segment or intersection, all responsible local jurisdictions shall participate in the development of a deficiency plan to be adopted by all participating local jurisdictions.

(2) The local jurisdiction in which the deficiency occurs shall have lead responsibility for developing the deficiency plan and for coordinating with other impacting local jurisdictions. If a local jurisdiction responsible for participating in a multi-jurisdictional deficiency plan does not adopt the deficiency plan in accordance with the schedule and requirements of paragraph (a) of this section, that jurisdiction shall be considered in nonconformance with the program for purposes of Section 65089.5.

(3) The agency shall establish a conflict resolution process for addressing conflicts or disputes between local jurisdictions in meeting the multi-jurisdictional deficiency plan responsibilities of this section.

(f) The analysis of the cause of the deficiency prepared pursuant to paragraph (1) of subdivision (c) shall exclude the following:

(1) Interregional travel.

(2) Construction, rehabilitation, or maintenance of facilities that impact the system.

(3) Freeway ramp metering.

(4) Traffic signal coordination by the state or multi-jurisdictional agencies.

(5) Traffic generated by the provision of low-income and very low income housing.

(6) (A) Traffic generated by high-density residential development located within one-fourth mile of a fixed rail passenger station, and

(B) Traffic generated by any mixed use development located within one-fourth mile of a fixed rail passenger station, if more than half of the land area, or floor area, of the mixed use development is used for high density residential housing, as determined by the agency.

(g) For the purposes of this section, the following terms have the following meanings:

(1) "High density" means residential density development which contains a minimum of 24 dwelling units per acre and a minimum density per acre which is equal to or greater than 120 percent of the maximum residential density allowed under the local general plan and zoning ordinance. A project providing a minimum of 75 dwelling units per acre shall automatically be considered high density.

(2) "Mixed use development" means development which integrates compatible commercial or retail uses, or both, with residential use and which, due to the proximity of job locations

shopping opportunities, and residences, will discourage new trip generation.

SEC. 8. Section 65089.5 of the Government Code is amended and renumbered to read:

65089.6. Failure to complete or implement a congestion management program shall not give rise to a cause of action against a city or county for failing to conform with its general plan, unless the city or county incorporates the congestion management program into the circulation element of its general plan.

SEC. 9. Section 65089.6 of the Government Code is amended and renumbered to read:

65089.7. A proposed development specified in a development agreement entered into prior to July 10, 1989, shall not be subject to any action taken to comply with this chapter, except actions required to be taken with respect to the trip reduction and travel demand element of a congestion management program pursuant to paragraph (3) of subdivision (b) of Section 65089.

SEC. 10. Section 65089.7 of the Government Code is amended and renumbered to read:

65089.8. (a) Buildings and structures that were damaged or destroyed in Los Angeles County as a result of the civil unrest during the state of emergency declared by the Governor on April 29, 1992, are not subject to the requirements of this chapter when permission is sought to repair or rebuild. This section does not exempt buildings or structures from any other requirement of the local jurisdiction otherwise applicable.

(b) This section shall become inoperative on June 1, 1995, and as of January 1, 1996, is repealed, unless a later enacted statute, which becomes effective on or before January 1, 1996, deletes or extends the dates on which it becomes inoperative and is repealed.

SEC. 11. Section 65089.9 is added to the Government Code, to read:

65089.9. The study steering committee established pursuant to Section 6 of Chapter 444 of the Statutes of 1992 may designate at least two congestion management agencies to participate in a demonstration study comparing multimodal performance standards to highway level of service standards. The department shall make available, from existing resources, fifty thousand dollars ($50,000) from the Transportation Planning and Development Account in the State Transportation Fund to fund each of the demonstration projects. The designated agencies shall submit a report to the Legislature not later than June 30, 1997, regarding the findings of each demonstration project.

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APPENDIX III

Congestion Management Roadway Network Segmentation

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CMP NETWORK - ARTERIALS

Rationale for Segmentation

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
1st Street					
Market-Harrison					
3rd Street					
Jamestown-Evans *		x	x		
Evans-China Basin		x			
China Basin-Market		x		x	
4th Street					
Market-Harrison					x
Harrison-3rd St					x
5th Street					
Market-Brannan					
6th Street					
Market-Brannan					
7th Street					
Brannan-Market					
8th Street					
Market-Bryant					
9th Street					
Brannan-Market					
10th Street					
Market-Brannan					
19th Avenue/Park Presidio Blvd					
U.S.101-Lake		x			
Lake-Lincoln		x	x		
Lincoln-Sloat			x		
Sloat-J.Serra			x		
Alemany Blvd					
C & C limit-Lyell *		x			
Lyell-Bayshore		x			
Army Street					
Guerrero-Kansas *	x	x			x
Kansas-Bryant *					x
Bryant-3rd St.					x
Bay Street					
Van Ness-Embarcadero					
Bayshore Blvd					
Army-Industrial *			x		x
Industrial- C & C limit			x		x
Beale/Davis					
Clay-Mission					
Brannan Street					
Division-9th St					
6th St-5th St					
Broadway					
Gough-Larkin	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Larkin-Powell (Tunnel)	x	x			
Powell-Montgomery		x			
Montgomery-Embarcadero			x		
Brotherhood Way					
J.Serra-Alemany					
Bryant Street					
Division-4th St					x
4th St-Embarcadero					x
Bush Street					
Masonic-Gough	x				
Gough-Market *	x		x		
Castro/Divisadero Street					
Pine-Geary			x		
Geary-14th St	x		x		
14th St-Market	x		x		
Clay Street					
Kearny-Davis					
Columbus Avenue					
North Point-Greenwich				x	
Greenwich-Montgomery			x		
Drumm Street					
Washington-Market					
Duboce Avenue					
Market-Mission *	x				
Mission-Potrero	x				
The Embarcadero					
Townsend-North Point					
Evans Avenue					
Army-3rd St *					
Fell Street					
Gough-Laguna					x
Laguna-Stanyan					x
Franklin Street					
Market-Pine			x		
Pine-Lombard	x				
Fremont Street					
Harrison-Market *					
Fulton Street					
Masonic-Arguello		x	x		
Arguello-Park Presidio *		x	x		
Geary Blvd					
Market-Gough	x	x			
Gough-Arguello		x			
Arguello-25th Ave			x		
25th Ave-Great Hwy	x		x		

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Geneva Avenue					
Phelan-Cayuga	x				
Cayuga-Paris	x				
Paris-Santos	x				
Golden Gate Avenue					
Masonic-Franklin	x	x	x		
Franklin-Market	x	x	x		
Gough Street					
Pine-Geary			x		
Geary-Golden Gate *	x				
Golden Gate-Market	x				
San Jose Avenue/Guerrero					
Army-29th St	x	x			
29th St-Monterey Blvd					x
Harrison Street					
Embarcadero-1st St *					x
1st St-4th St					x
4th St-8th St					x
8th St-13th St					x
Hayes Street					
Market-Gough					
Howard Street					
Embarcadero-S.Van Ness					
Junipero Serra Blvd					
Sloat-19th Ave *		x	x		
19th Ave-Brotherhood Way			x		
Brotherhood-C & C limit			x		
Kearny Street					
Market-Columbus					
King Street					
6th St-Embarcadero					
Lincoln Blvd/Kezar Drive					
19th Ave-5th Ave	x				
5th Ave-Stanyan	x				
Lombard Street					
Francisco-Van Ness *					
Main Street					
Mission-Market					
Market/Portola					
Sloat-Santa Clara	x				
Santa Clara-Clipper *	Grade Change				
Clipper-Castro	x				
Castro-Guerrero	x				
Guerrero-Van Ness			x	x	
Van Ness-Drumm	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Masonic Avenue					
Pine-Geary			x		
Geary-Page			x		
Mission/Otis					
Embarcadero-3rd St	x				
3rd St-9th St	x				
9th St-14th St	x				
14th St-Army *	x				
Army-Ocean *			x		
Ocean-Sickles	x				
Montgomery Street					
Broadway-Bush					
North Point Street					
Van Ness-Columbus			x		
Columbus-Embarcadero			x		
O'Farrell Street					
Gough-Mason *	x				
Mason-Market	x				
Oak Street					
Stanyan-Divisadero *	x		x		
Divisadero-Laguna	x		x		x
Laguna-Franklin					x
Ocean Avenue					
19th Ave-Miramar *	x				
Miramar-I-280	x				
Pine Street					
Market-Kearny	x				
Kearny-Leavenworth	x				
Leavenworth-Franklin	x				
Franklin-Presidio	x				
Potrero Avenue					
Division-21st St	x			x	
21st St-Army	x			x	
Skyline Drive					
Sloat-City & County limit					
Sloat Boulevard					
Skyline-J.Serra					
Stanyan Street					
Fulton-Turk					
Sutter Street					
Market-Mason *	x				
Mason-Gough	x				
Gough-Divisadero	x		x		
Turk Street					
Market-Hyde	x				
Hyde-Gough	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Hyde-Gough	x				
Gough-Divisadero	x				
Divisadero-Stanyan			x		
Van Ness Avenue					
Lombard-Washington	Sig.	Syst.	Change		
Washington-GoldenGate Av *	x				
Golden Gate Ave-13th St *					x
13th St-Army					x
Washington Street					
Kearny-Drumm					
West Portal Avenue					
Sloat-Ulloa					

* indicates change in segment boundary.

CMP NETWORK - FREEWAYS

Rationale for Segmentation

Freeway	Split	Off-ramp	On-ramp
I-280			
C & C limit- U.S. 101	x		
101/280 -6th/Brannan	x		
U.S.101			
C & C limit- I-280	x		
I-280- I-80	x		
I-80- Fell/Laguna	x		
I-80			
U.S. 101- Fremont		x	
Fremont- Treasure Island		x	

APPENDIX IV

Results of Level of Service Monitoring
April/May 1995

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Table I
Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
1st Street	Market	Harrison	3	S	0.47		*	15.1	C		
3rd Street	Jamestown	Evans	3	N	1.61		*	25.4	B		
	Evans	Jamestown	3	S	1.61		*	22.3	C		
	Evans	China Basin	3	N	1.00	10.3	D	24.0	B		
	China Basin	Evans	3	S	2.40	10.3	D	24.1	B		
	China Basin	Market	3	N	2.40	12.1	D	12.1	D	15.3	C
4th St/ Stockton	O'Farrell	Harrison	3	S			*	11.6	D	8.1	E
	Harrison	3rd Street	3	S	0.76		*	15.0	C		
5th Street	Market	Brannan	3	S	0.72	7.9	E	11.6	C		
	Brannan	Market	3	N	0.72	7.9	E	10.5	D	10.7	D
6th Street	Market	Brannan	3	S	0.71		*	22.4	B		
	Brannan	Market	3	N	0.71		*	13.8	C		
7th Street	Brannan	Market	3	N	0.72	8.9	E	13.9	C		
8th Street	Market	Bryant	3	S	0.59		*	17.1	C		
9th Street	Brannan	Market	3	N	0.72	9.9	D	12.5	D	13.3	C
10th Street	Market	Brannan	3	S	0.71	12.1	D	20.5	B		
19th Avenue/ Park Presidio	U.S. 101	Lake	1	S	1.54		*	38.3	A		
	Lake	U.S. 101	1	N	1.57		*	38.8	A		
	Lake	Lincoln	3	S	1.83		*	20.9	B		
	Lincoln	Lake	3	N	1.83		*	21.9	B		
	Lincoln	Sloat	3	S	2.12	11.1	D	17.2	C		
	Sloat	Lincoln	3	N	2.12	11.1	D	19.2	B		
	Sloat	J. Serra	3	S	1.25		*	20.2	B		
	J. Serra	Sloat	3	N	1.25		*	19.2	B		
Alemany	County Line	Lyell	3	E	2.79		*	25.6	B		
	Lyell	County Line	3	W	2.79		*	25.6	B		
	Lyell	Bayshore	3	E	1.42		*	28.5	A		
	Bayshore	Lyell	3	W	1.42		*	35.4	A		
Army	Guerrero	SVN	3	E	0.36		*	16.1	C		
	SVN	Guerrero	3	W	0.36	5.8	F	17.8	C		
	SVN	Evans	3	E	1.02		*	21.0	B		
	Evans	SVN	3	W	1.02		*	20.6	B		
	Evans	Penn.	3	E			*		~		
	Penn.	Evans	3	W			*		~		
	Penn.	3rd Street	3	E			*		~		
	3rd Street	Penn.	3	W			*		~		
	Guerrero	Bryant	3	E	0.75			19.0	B		
	Bryant	Guerrero	3	W	0.75			19.6	B		
	Kansas	Bryant	3	E	0.37			17.7	C		
	Bryant	Kansas	3	W	0.37			19.9	B		
	Kansas	3rd Street	3	E	0.79			17.6	C		
	3rd Street	Kansas	3	W	0.79			19.4	B		
Bay	Van Ness	Embarcadero	3	E	0.71	12.7	D	22.4	B		
	Embarcadero	Van Ness	3	W	0.71	12.7	D	19.7	B		

Table I
Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Bayshore	Oakdale	I-280	3	S		7.9	E		~		
	I-280	Oakdale	3	N		7.9	E		~		
	I-280	Silver	3	S			*		~		
	Silver	I-280	3	N			*		~		
	Silver	Paul	3	S		4.9	F		~		
	Paul	Silver	3	N		4.9	F		~		
	Paul	County Line	3	S			*		~		
	County Line	Paul	3	N			*		~		
	Army	Industrial	3	S	0.83			21.0	B		
	Industrial	Army	3	N	0.83			20.2	B		
	Industrial	County Line	3	S	2.24			27.4	A		
	County Line	Industrial	3	N	2.24			20.9	B		
Beale/Davis	Clay	Mission	3	S	0.31		*	11.3	D	10.0	D
Brannan	Division	9th Street	3	E	0.08		*	14.4	C	9.2	D
	9th Street	Division	3	W	0.08		*	13.7	C		
	6th Street	5th Street	3	E	0.09		*	7.7	E	7.7	E
	5th Street	6th Street	3	W	0.09		*	8.9	E	6.1	F
Broadway	Gough	Larkin	3	E	0.57		*	19.2	B		
	Larkin	Gough	3	W	0.27		*	10.6	D	11.2	D
	Larkin	Powell	1	E	0.54		*	22.5	B		
	Powell	Larkin	1	W	0.54		*	35.6	A		
	Powell	Montgomery	3	E	0.34		*	16.8	C		
	Montgomery	Powell	3	W	0.34		*	15.2	C		
	Montgomery	Embarcdero	3	E	0.35		*	11.2	D	9.4	D
	Embarcadero	Montgomery	3	W	0.35		*	17.7	C		
Bryant	Division	4th Street	3	E	0.99	7.7	E	12.2	D	13.2	C
	4th Street	Embarcadero	3	E	0.78		*	21.8	B		
Bush	Masonic	Gough	3	E	1.23		*	17.3	C		
	Gough	Market	3	E	1.36	3.2	F	10.9	D	9.6	D
Castro/ Divisadero	Pine	Geary	3	S	0.27		*	14.2	C		
	Geary	Pine	3	N	0.27		*	10.8	D	7.7	E
	Geary	14th	3	S	1.16		*	14.8	C		
	14th	Geary	3	N	1.16	4.5	F	14.0	C		
	14th Street	Market	3	S	0.34		*	11.9	D	10.4	D
	Market	14th Street	3	N	0.34		*	17.5	C		
Clay	Kearny	Davis	3	E	0.22	11.7	D	3.7	E		
Columbus	North Point	Greenwich	3	S	0.50		*	18.6	C		
	Greenwich	North Point	3	N	0.50		*	22.6	B		
	Greenwich	Montgomery	3	S	0.67		*	16.3	C		
	Montgomery	Greenwich	3	N	0.67		*	14.0	C		
Drumm	Washington	Market	3	S	0.23		*	5.3	F	5.3	F
	Market	Washington	3	N	0.23		*	19.9	B		
Duboce/ Division	Market	Mission	3	E	0.34		*	7.7	E	9.1	D
	Mission	Market	3	W	0.34		*	10.7	D	11.7	D
	Mission	Potrero	3	E	0.64	9.9	D	12.0	D	11.5	D
	Potrero	Mission	3	W	0.64	9.9	D	17.1	C		
Embarcadero	Townsend	North Point	3	N			*	21.2	B		
	North Point	Townsend	3	S			*	15.2	C		

Table I

Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Evans	Army	Toland	3	S	0.18		*	14.3	C		
	Toland	Army	3	N	0.18		*	12.1	D	16.5	C
	Toland	3rd Street	3	S	0.53		*	17.0	C		
	3rd Street	Toland	3	N	0.53		*	25.9	A		
	Army	3rd Street	3	S	0.71			16.3	C		
	3rd Street	Army	3	N	0.71			19.9	B		
Fell	Gough	Market	3	E	0.30		*	11.6	D	12.0	D
	Gough	Laguna	3	W	0.20		*	26.7	A		
	Laguna	Stanyan	3	W	1.55		*	19.0	B		
Franklin	Market	Pine	3	N	1.06	8.5	E	13.3	C		
	Pine	Lombard	3	N	0.82		*	14.0	C		
Fremont	Harrison	Market	3	N	0.85		*	6.4	F		
Fulton	Park Pres.	10th Avenue	3	E	0.20		*	16.7	C		
	10th Avenue	Park Pres.	3	W	0.20		*	14.2	C		
	10th Avenue	Arguello	3	E	0.53		*	22.4	B		
	Arguello	10th Avenue	3	W	0.53		*	22.0	B		
	Arguello	Masonic	3	E	0.66	9.8	D	18.6	C		
	Masonic	Arguello	3	W	0.66		*	15.9	C		
Geary	Great Hwy.	25th Avenue	3	E	1.47		*	24.2	B		
	25th Avenue	Great Hwy.	3	W	1.47		*	28.3	A		
	25th Avenue	Arguello	3	E			*	21.6	B		
	Arguello	25th Avenue	3	W			*	21.3	B		
	Arguello	Gough	3	E			*	25.3	A		
	Gough	Arguello	3	W			*	23.8	B		
	Market	Gough	3	W			*	12.3	D	15.4	C
Geneva	Phelan	Cayuga	3	E	0.57		*	15.0	C		
	Cayuga	Phelan	3	W	0.57		*	4.5	F	15.5	C
	Cayuga	Paris	3	E	0.40	10.4	D	11.7	D	13.0	C
	Paris	Cayuga	3	W	0.40	10.4	D	11.6	D	13.3	C
	Paris	Santos	3	E	1.18		*	29.7	A		
	Santos	Paris	3	W	1.18		*	27.4	A		
Golden Gate	Masonic	Franklin	3	E	1.36		*	19.3	B		
	Franklin	Market	3	E		12.2	D	16.9	C		
Gough	Pine	Geary	3	S	0.27	9.5	D	25.6	A		
	Geary	Golden Gate	3	S	0.34		*	20.1	B		
	Golden Gate	Market	3	S	0.57	8.3	E	12.8	D	11.1	D
Guerrero/ San Jose	Army	29th Street	3	S	0.10		*	26.3	A		
	29th Street	Army	3	N	0.10	6.2	F	19.3	B		
	29th Street	Monterey	1	S	0.97		*	23.7	B		
	Monterey	29th Street	1	N	1.24		*	17.3	C		
Harrison	Embarcadero	1st Street	3	W	0.84			34.8	A		
	1st Street	4th Street	3	W	0.56			27.6	A		
	4th Street	8th Street	3	W	0.68			28.9	A		
	8th Street	Division	3	W	0.40			14.4	C		
	Embarcadero	2nd Street	3	W	0.49		*		~		
	2nd Street	4th Street	3	W	0.35		*		~		
	4th Street	8th Street	3	W	0.69		*		~		
	8th Street	Division	3	W	0.40		*		~		
Hayes	Market	Gough	3	W	0.38		*	10.2	D	11.1	D

Table I
Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Howard	Embarcadero	SVN	3	W	2.20		*	14.9	C		
J. Serra	Sloat	19th	1	S	1.25		*	32.4	B		
	19th	Sloat	1	N	1.25		*	27.0	C		
	19th	Brotherhood	1	S	0.30		*	19.9	B		
	Brotherhood	19th	1	N	0.30	9.7	D	23.8	C		
	Brotherhood	County Line	1	S	0.37		*	41.9	A		
	County Line	Brotherhood	1	N	0.37		*	40.4	A		
Kearny	Market	Columbus	3	N	0.63	6.3	F	13.7	C		
King	7th Street	2nd Street	3	E			*	12.4	D	15.6	C
	2nd Street	7th Street	3	W			*	13.9	C		
Lincoln/ Kezar	19th Avenue	5th Ave.	3	E	0.83		*	22.6	B		
	5th Ave.	19th Avenue	3	W	0.83		*	25.2	A		
	5th Ave.	Stanyan	3	E	0.69		*	10.7	D	12.2	D
	Stanyan	5th Ave.	3	W	0.69		*	31.7	A		
Lombard	Francisco	Broderick	3	E	0.16	7.6	E		~		
	Broderick	Francisco	3	W	0.16		*		~		
	Broderick	Pierce	3	E	0.31		*		~		
	Pierce	Broderick	3	W	0.31		*		~		
	Pierce	Laguna	3	E	0.45		*		~		
	Laguna	Pierce	3	W	0.45		*		~		
	Laguna	Van Ness	3	E	0.33		*		~		
	Van Ness	Laguna	3	W	0.33		*		~		
	Francisco	Van Ness	3	E	1.28			22.2	B		
	Van Ness	Francisco	3	W	1.28			19.7	B		
Main	Mission	Market	3	N	0.13		*	9.9	D	9.8	D
Market/ Portola	Sloat	Santa Clara	3	E	0.41		*	16.0	C		
	Santa Clara	Sloat	3	W	0.41		*	13.2	C		
	Santa Clara	Clipper	3	E	2.45		*	24.1	B		
	Clipper	Santa Clara	3	W	2.45		*	22.8	B		
	Clipper	Castro	3	E	1.67	7.0	F	33.0	A		
	Castro	Clipper	3	W	1.67		*	28.0	B		
	Castro	Guerrero	3	E	0.80	8.7	E	20.0	B		
	Guerrero	Castro	3	W	0.80		*	18.8	B		
	Guerrero	Van Ness	3	E	0.22	8.3	E	16.3	C		
	Van Ness	Guerrero	3	W	0.22	8.3	E	17.8	C		
	Van Ness	Drumm	3	E	1.76	9.6	D	14.4	C		
	Drumm	Van Ness	3	W	1.76	9.6	D	15.3	C		
Masonic	Pine	Geary	3	S	0.27	8.5	E	11.2	D	15.7	C
	Geary	Pine	3	N	0.27	8.5	E	14.6	C		
	Geary	Page	3	S	0.73	10.0	D	16.4	C		
	Page	Geary	3	N	0.73	10.0	D	13.1	C		
Mission/ Otis	Embarcadero	3rd Street	3	S		9.7	D	8.0	E	10.8	D
	3rd Street	Embarcadero	3	N		9.7	D	8.9	E	10.8	D
	3rd Street	9th Street	3	S			*	16.9	C		
	9th Street	3rd Street	3	N			*	13.7	C		
	9th Street	14th Street	3	S		9.7	D	12.8	D	12.8	D
	14th Street	9th Street	3	N			*	12.0	D	11.3	D
	14th Street	Army	3	S		10.9	D	17.9	C		
	Army	14th Street	3	N		10.9	D	19.8	B		
	Army	Ocean	3	S	1.94		*	17.6	C		
	Ocean	Army	3	N	1.94		*	20.3	B		

Table I
Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Mission/	Ocean	Sickles	3	S	1.88		*	20.8	B		
Otis	Sickles	Ocean	3	N	1.88		*	21.1	B		
Montgomery	Broadway	Bush	3	S	0.38	6.2	F	6.5	F		
North Point	Van Ness	Columbus	3	E	0.38		*	15.2	C		
	Columbus	Van Ness	3	W	0.38		*	15.3	C		
	Columbus	Embarcadero	3	E			*	14.9	C		
	Embarcadero	Columbus	3	W			*	16.0	C		
Oak	Stanyan	Lyon	3	E	0.64		*		~		
	Lyon	Divisadero	3	E	0.27	7.5			~		
	Divisadero	Fillmore	3	E	0.36		*		~		
	Fillmore	Laguna	3	E	0.27	8.2			~		
	Laguna	Franklin	3	E			*		~		
	Stanyan	Divisadero	3	E	0.91			23.1	B		
	Divisadero	Laguna	3	E	0.63			21.7	B		
	Laguna	Franklin	3	E			*	20	B		
Ocean	19th Avenue	Miramar	3	E			*	19.5	B		
	Miramar	19th Avenue	3	W			*	15.4	C		
	Miramar	Howth	3	E			*				
	Howth	Miramar	3	W			*	9.4	D	16.3	C
O'Farrell	Gough	Mason	3	E	0.93		*	16.6	C		
	Mason	Market	3	E	0.27		*	18.7	C		
Pine	Market	Kearny	3	W	0.38	4.6	F	9.9	D	7.3	E
	Kearny	Leavenworth	3	W	0.63		*	16.2	C		
	Leavenworth	Franklin	3	W	0.46		*	17.2	C		
	Franklin	Presidio	3	W	1.26		*	20.0	B		
Potrero	Division	21st Street	3	S	0.80		*	24.8	B		
	21st Street	Division	3	N	0.80		*	21.4	B		
	21st Street	Army	3	S			*	20.1	B		
	Army	21st Street	3	N			*	25.2	A		
Skyline	Sloat	County Line	3	S	2.32		*	41.6	A		
	County Line	Sloat	3	N	1.92		*	43.7	A		
Sloat	Skyline	J. Serra	1	E	1.36		*	19.8	D	21.5	D
	J. Serra	Skyline	1	W	1.34		*	23.3	C		
Stanyan	Fulton	Turk	3	N	0.19		*	12.2	D	12.8	D
	Turk	Fulton	3	S	0.19		*	11.6	D	7.4	E
Sutter	Market	Mason	3	W	1.08		*	11.6	D	10.2	D
	Mason	Gough	3	W	0.87	9.0	D	12.3	D	13.4	C
	Gough	Divisadero	3	W	0.82		*	14.1	C		
	Divisadero	Gough	3	E	0.82		*	13.9	C		
Turk	Market	Hyde	3	W	0.37		*	10.9	D	11.6	D
	Hyde	Gough	3	W	0.45		*	14.1	C		
	Gough	Divisadero	3	W	0.82		*	22.1	B		
	Divisadero	Stanyan	3	W	0.91		*	17.1	C		
	Stanyan	Divisadero	3	E	0.91		*	21.0	B		
Van Ness/	Lombard	Washington	3	S	0.58	4.5	F	18.2	C		
SVN	Washington	Lombard	3	N	0.58		*	11.9	D	14.3	D
	Washington	Golden Gate	3	S	0.51		*	15.0	C		

Table I
Results of Level of Service Monitoring - Arterials - A.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Van Ness/ SVN	Golden Gate	Washington	3	N	0.51		*	13.6	C		
	Golden Gate	13th	3	S	1.21		*	17.3	C		
	13th	Golden gate	3	N			*	15.9	C		
	13th	Army	3	S	1.39	12.6	D	15.7	C		
	Army	Market	3	N	1.39		*	20.4	B		
Washington	Drumm	Kearny	3	W	0.28		*	14.2	C		
West Portal	Ulloa	Sloat	3	S	0.38		*	16.1	C		
	Sloat	Ulloa	3	N	0.38		*	17.8	C		

NOTE: Average Speed (AvSp) is an indication of the average travel time. All sample times for each segment were averaged to obtain the AvSp.

* indicates the Level of Service 'C' or better for that particular segment

~ indicates an 'overlap' in segments because of changes in the segmentation boundaries from 1991.

Table II
Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
1st Street	Market	Harrison	3	S	0.47	1.2	F	15.5	C		
3rd Street	Jamestown	Evans	3	N	1.56		*	18.5	C		
	Evans	Jamestown	3	S	1.56		*	17.6	C		
	Evans	China Basin	3	N	2.40	10.3	D	18.5	C		
	China Basin	Evans	3	S	2.40	10.3	D	17.0	C		
	China Basin	Market	3	N	1.00	12.1	D	8.8	D	11.6	D
4th St/ Stockton	Market	Harrison	3	S		4.7	F	8.4	E	10.5	D
	Harrison	3rd Street	3	S	0.76		*	23.0	B		
5th Street	Market	Brannan	3	S	0.72	7.9	E	13.5	C		
	Brannan	Market	3	N	0.72	7.9	E	12.7	D	7.7	E
6th Street	Market	Brannan	3	S	0.71	6.7	F	11.5	D	12.0	D
	Brannan	Market	3	N	0.71		*	12.7	D	7.6	E
7th Street	Brannan	Market	3	N	0.72	8.9	E	16.8	C		
8th Street	Market	Bryant	3	S	0.59		*	15.8	C		
9th Street	Brannan	Market	3	N	0.72	9.9	D	12.4	D	9.7	D
10th Street	Market	Brannan	3	S	0.71	12.1	D	20.5	B		
19th Avenue/ Park Presidio	U.S. 101	Lake	1	S	1.54		*	36.4	A		
	Lake	U.S. 101	1	N	1.57		*	35.9	A		
	Lake	Lincoln	3	S	1.83		*	26.4	A		
	Lincoln	Lake	3	N	1.83		*	25.4	A		
	Sloat	Lincoln	3	N	2.12	11.1	D	21.9	B		
	Lincoln	Sloat	3	S	2.12	11.1	D	21.0	B		
	J. Serra	Sloat	3	N	1.25		*	18.4	C		
	Sloat	J. Serra	3	S	1.25		*	17.5	C		
Alemany	County Line	Lyell	3	E	2.79		*	29.5	B		
	Lyell	County Line	3	W	2.79		*	22.1	C		
	Lyell	Bayshore	3	E	1.42		*	32.9	A		
	Bayshore	Lyell	3	W	1.42	4.6	F	30.8	A		
Army	Guerrero	Bryant	3	E	0.75			20.7	B		
	Bryant	Guerrero	3	W	0.75			16.5	C		
	Kansas	Bryant	3	E	0.37			17.5	C		
	Bryant	Kansas	3	W	0.37			26.7	B		
	Kansas	3rd Street	3	E	0.79			17.3	C		
	3rd Street	Kansas	3	W	0.79			16.3	C		
	Guerrero	SVN	3	E	0.36		*	14.5	C		
	SVN	Guerrero	3	W	0.36	5.8	F	17.8	C		
	SVN	Evans	3	E	1.02		*	19.6	B		
	Evans	SVN	3	W	1.02		*	20.5	B		
	Evans	Penn.	3	E			*				
	Penn.	Evans	3	W		6.5	F	16.6	C		
	Penn.	3rd Street	3	E			*				
	3rd Street	Penn.	3	W			*	14.8	C		
Bay	Van Ness	Embarcadero	3	E	0.71	12.7	D	16.8	C		
	Embarcadero	Van Ness	3	W	0.71	12.7	D	12.0	D	15.7	C

Table II
Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Bayshore	Oakdale	I-280	3	S		7.9	E		~		
	I-280	Oakdale	3	N		7.9	E		~		
	I-280	Silver	3	S			*		~		
	Silver	I-280	3	N			*		~		
	Silver	Paul	3	S			*		~		
	Paul	Silver	3	N			*		~		
	Paul	County Line	3	S			*		~		
	County Line	Paul	3	N			*		~		
	Army	Industrial	3	S	0.83			21.0	B		
	Industrial	Army	3	N	0.83			26.4	A		
	Industrial	County Line	3	S	2.24			22.0	B		
	County Line	Industrial	3	N	2.24			22.6	B		
Beale/Davis	Clay	Mission	3	S	0.31		*	13.4	C		
Brannan	Division	9th Street	3	E	0.08		*	25.4	A		
	9th Street	Division	3	W	0.08		*	13.1	C		
	6th Street	5th Street	3	E	0.09		*	14.3	C		
	5th Street	6th Street	3	W	0.09		*	11.7	D	11.6	D
Broadway	Gough	Larkin	3	E	0.57		*	14.6	C		
	Larkin	Gough	3	W	0.27	7.7	E	14.6	C		
	Larkin	Powell	1	E	0.54		*	38.9	A		
	Powell	Larkin	1	W	0.54		*	24.7	C		
	Powell	Montgomery	3	E	0.34		*	16.3	C		
	Montgomery	Powell	3	W	0.34	6.2	F	8.4	E	9.2	D
	Montgomery	Embarcadero	3	E	0.35		*	13.1	C		
	Embarcadero	Montgomery	3	W	0.35		*	15.4	C		
Bryant	Division	4th Street	3	E	0.99	7.7	E	11.8	D	9.8	D
	4th Street	Embarcadero	3	E	0.78		*	13.2	C		
Bush	Masonic	Gough	3	E	1.23		*	20.0	B		
	Gough	Market	3	E	1.36	3.2	F	10.1	D	11.5	D
Castro/ Divisadero	Pine	Geary	3	S	0.27		*	11.6	D	8.1	E
	Geary	Pine	3	N	0.27		*	8.4	E	13.5	C
	Geary	14th	3	S	1.16		*	15.7	C		
	14th	Geary	3	N	1.16	4.5	F	12.8	D	11.2	D
	14th Street	Market	3	S	0.34		*	13.8	C		
	Market	14th Street	3	N	0.34	7.7	E	16.7	C		
Clay	Kearny	Davis	3	E	0.22	11.7	D	7.0	E	8.7	E
Columbus	North Point	Greenwich	3	S	0.50		*	15.2	C		
	Greenwich	North Point	3	N	0.50		*	13.4	C		
	Greenwich	Montgomery	3	S	0.67	6.3	F	16.0	C		
	Montgomery	Greenwich	3	N	0.67	6.3	F	12.8	D	12.9	D
Drumm	Washington	Market	3	S	0.23		*	9.3	D	3.6	F
	Market	Washington	3	N	0.23		*	12.8	D	13.5	C
Duboce/ Division	Market	Mission	3	E	0.34		*	10.0	D	15.4	C
	Mission	Market	3	W	0.34	6.3	F	6.2	F		
	Mission	Potrero	3	E	0.64	9.9	D	14.1	C		
	Potrero	Mission	3	W	0.64	9.9	D	16.4	C		
Embarcadero	North Point	Townsend	3	S			*	9.0	D	16.4	C
	Townsend	North Point	3	N			*	16.7	C		

Table II
Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Evans	Army	Toland	3	S	0.18		*	20.4	B		
	Toland	Army	3	N	0.18	5.1	F	11.6	D	14.4	C
	Toland	3rd Street	3	S	0.53		*	21.8	B		
	3rd Street	Toland	3	N	0.53		*	27.6	A		
	Army	3rd Street	3	S	0.71			21.4	B		
	3rd Street	Army	3	N	0.71			20.3	B		
Fell	Gough	Market	3	E	0.30		*	13.5	C		
	Gough	Laguna	3	W	0.28	5.6	F	13.3	C	7.3	E
	Laguna	Stanyan	3	W	1.55		*	20.7	B		
Franklin	Market	Pine	3	N	1.06	8.5	E	18.8	C		
	Pine	Lombard	3	N	0.82		*	16.4	C		
Fremont	Harrison	Market	3	N	0.85		*	9.3	D	10.6	D
Fulton	Park P.	Arguello	3	E	0.73		*	20.1	B		
	Arguello	Park P.	3	W	0.73		*	15.9	C		
	Arguello	Masonic	3	E	0.66	9.8	D	13.2	C		
	Masonic	Arguello	3	W	0.66		*	18.9	C		
Geary	Great Hwy.	25th Avenue	3	E	1.47		*	26.2	A		
	25th Avenue	Great Hwy.	3	W	1.47		*	23.9	B		
	25th Avenue	Arguello	3	E			*	21.5	B		
	Arguello	25th Avenue	3	W		11.3	D	20.3	B		
	Arguello	Gough	3	E		11.3	D	22.6	B		
	Gough	Arguello	3	W			*	23.1	B		
	Market	Gough	3	W		6.7	F	9.9	D	14.4	C
Geneva	Phelan	Cayuga	3	E	0.57		*	12.0	D	17.2	C
	Cayuga	Phelan	3	W	0.57	6.7	F	10.4	D	12.0	D
	Cayuga	Paris	3	E	0.40	10.4	D	12.1	D	10.5	D
	Paris	Cayuga	3	W	0.40	10.4	D	12.3	D	10.7	D
	Paris	Santos	3	E	1.18		*	20.5	B		
	Santos	Paris	3	W	1.18		*	22.6	B		
Golden Gate	Masonic	Franklin	3	E	1.36		*	20.4	B		
	Franklin	Market	3	E		12.2	D	15.2	C		
Gough	Pine	Geary	3	S	0.27	9.5	D	21.8	B		
	Geary	Golden Gate	3	S	0.34		*	17.1	C		
	Golden Gate	Market	3	S	0.57	8.3	E	16.4	C		
Guerrero/ San Jose	Army	29th Street	3	S	0.10		*	24.0	B		
	29th Street	Army	3	N	0.10		*	12.6	D	7.9	E
	29th Street	Monterey	1	S	0.97		*	21.6	D	23.0	C
	Monterey	29th Street	1	N	1.24		*	30.8	B		
Harrison	Embarcadero	1st Street	3	W	0.84			11.4	D	11.6	D
	1st Street	4th Street	3	W	0.56			20.5	B		
	4th Street	8th Street	3	W	0.68			19.1	B		
	8th Street	Division	3	W	0.40			13.6	C		
	Embarcadero	2nd Street	3	W	0.49	5.7	F		~		
	2nd Street	4th Street	3	W	0.35	2.9	F		~		
	4th Street	8th Street	3	W	0.69	12.7	D		~		
	8th Street	Division	3	W	0.40		*		~		
Hayes	Market	Gough	3	W	0.38	5.6	F	11.7	D	15.7	C
Howard	Embarcadero	S. Van Ness	3	W	2.20	5.4	F	13.6	C		

Table II
Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
J. Serra	Sloat	19th	1	S	0.91		*	18.0	D	20.6	D
	19th	Sloat	1	N	0.91		*	20.5	D	18.9	D
	19th	Brotherhood	1	S	0.63		*	22.1	C		
	Brotherhood	19th	1	N	0.63		*	19.1	D	21.7	D
	Brotherhood	County Line	1	S	0.37		*	48.1	A		
	County Line	Brotherhood	1	N	0.37		*	40.4	A		
Keamy	Market	Columbus	3	N	0.63	6.3	F	12.9	D	10.8	D
King	7th Street	2nd Street	3	E			*	11.8	D	19.6	B
	2nd Street	7th Street	3	W			*	16.9	C		
Lincoln/ Kezar	19th Avenue	5th Ave.	3	E	0.83		*	16.4	C		
	5th Ave.	19th Avenue	3	W	0.83	11.3	D	20.8	B		
	5th Ave.	Stanyan	3	E	0.69		*	22.8	B		
	Stanyan	5th Ave.	3	W	0.69		*	21.3	B		
Lombard	Francisco	Broderick	3	E	0.16		*		~		
	Broderick	Francisco	3	W	0.16		*		~		
	Broderick	Pierce	3	E	0.31		*		~		
	Pierce	Broderick	3	W	0.31		*		~		
	Pierce	Laguna	3	E	0.45		*		~		
	Laguna	Pierce	3	W	0.45	7.0	F		~		
	Laguna	Van Ness	3	E	0.33		*		~		
	Van Ness	Laguna	3	W	0.33	8.6	E		~		
	Francisco	Van Ness	3	E	1.28			16.4	C		
	Van Ness	Francisco	3	W	1.28			20.5	B		
Main	Mission	Market	3	N	0.13		*	9.8	D	8.4	E
Market/ Portola	Sloat	Santa Clara	3	E	0.41		*	16.5	C		
	Santa Clara	Sloat	3	W	0.41	11.8	D	22.2	B		
	Santa Clara	Clipper	3	E	2.45		*	23.6	B		
	Clipper	Santa Clara	3	W	2.45		*	19.6	B		
	Clipper	Castro	3	E	1.67		*	34.1	A		
	Castro	Clipper	3	W	1.67		*	27.0	A		
	Castro	Guerrero	3	E	0.80		*	15.0	C		
	Guerrero	Castro	3	W	0.80		*	16.5	C		
	Guerrero	Van Ness	3	E	0.42	8.3	E	17.9	C		
	Van Ness	Guerrero	3	W	0.42	8.3	E	12.5	D	8.0	E
	Van Ness	Drumm	3	E	1.76	9.6	D	12.9	D	6.3	F
	Drumm	Van Ness	3	W	1.76	9.6	D	15.5	C		
Masonic	Pine	Geary	3	S	0.27	8.5	E	9.3	D	12.7	D
	Geary	Pine	3	N	0.27	8.5	E	21.5	B		
	Geary	Page	3	S	0.73	10.0	D	13.4	C		
	Page	Geary	3	N	0.73	10.0	D	13.6	C		
Mission/ Otis	Embarcadero	3rd Street	3	S		9.7	D	7.6	D	13.0	C
	3rd Street	Embarcadero	3	N		9.7	D	15.9	C		
	3rd Street	9th Street	3	S			*	19.1	B		
	9th Street	3rd Street	3	N			*	19.9	B		
	9th Street	14th Street	3	S		9.7	D	14.9	C		
	14th Street	9th Street	3	N			*	12.2	D	9.9	D
	14th Street	Army	3	S		10.9	D	14.9	C		
	Army	14th Street	3	N		10.9	D	10.5	D	12.3	D
	Army	Ocean	3	S	1.94		*	15.6	C		
	Ocean	Army	3	N	1.94		*	17.3	C		
	Ocean	Sickles	3	S	1.88		*	15.1	C		
	Sickles	Ocean	3	N	1.88		*	18.1	C		

Table II
Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Montgomery	Broadway	Bush	3	S	0.38	6.2	F	2.4	F		
North Point	Van Ness	Columbus	3	E	0.38		*	15.4	C		
	Columbus	Van Ness	3	W	0.38	8.5	E	20.9	B		
	Columbus	Embarcadero	3	E			*	14.5	C		
	Embarcadero	Columbus	3	W			*	16.9	C		
Oak	Stanyan	Lyon	3	E	0.64		*		~		
	Lyon	Divisadero	3	E	0.27	7.5	E		~		
	Divisadero	Fillmore	3	E	0.36		*		~		
	Fillmore	Laguna	3	E	0.27	8.2	E		~		
	Laguna	Franklin	3	E	0.27		*	23.1	B		
	Stanyan	Divisadero	3	E	0.91			21.6	B		
	Division	Laguna	3	E	0.63			20.1	B		
	Laguna	Franklin	3	E	0.27			23.1	B		
Ocean	19th Avenue	Miramar	3	E	1.10		*	17.1	C		
	Miramar	19th Avenue	3	W	1.10		*	14.6	C		
	Miramar	Howth	3	E	0.48	0.8	F	21.0	B		
	Howth	Miramar	3	W	0.48	6.1	F	14.9	C		
O'Farrell	Gough	Mason	3	E	0.93	5.7	F	13.7	C		
	Mason	Market	3	E	0.27	6.9	F	7.9	E		
Pine	Market	Kearny	3	W	0.38	4.6	F	10.8	D	7.3	E
	Kearny	Leavenworth	3	W	0.63		*	12.9	D	19.8	B
	Leavenworth	Franklin	3	W	0.46	4.8	F	13.2	C		
	Franklin	Presidio	3	W	1.26		*	15.3	C		
Potrero	Division	21st Street	3	S	0.80		*	22.6	B		
	21st Street	Division	3	N	0.80		*	21.4	B		
	21st Street	Army	3	S		4.8	F	13.7	C		
	Army	21st Street	3	N			*	23.3	B		
Skyline	Sloat	County Line	3	S	2.32		*	42.1	A		
	County Line	Sloat	3	N	1.92		*	44.9	A		
Sloat	Skyline	J. Serra	1	E	1.36		*	19.2	D	24.9	C
	J. Serra	Skyline	1	W	1.34		*	23.2	C		
Stanyan	Fulton	Turk	3	N	0.19	4.6	F	10.8	D	11.6	D
	Turk	Fulton	3	S	0.19		*	7.6	D	10.5	D
Sutter	Market	Mason	3	W	1.08		*	7.3	E	12.4	D
	Mason	Gough	3	W	0.87	9.0	D	17.0	C		
	Gough	Divisadero	3	W	0.82		*	16.6	C		
	Divisadero	Gough	3	E	0.82		*	15.4	C		
Turk	Market	Hyde	3	W	0.37		*	14.9	C		
	Hyde	Gough	3	W	0.45	8.7	E	14.9	C		
	Gough	Divisadero	3	W	0.82		*	27.1	A		
	Divisadero	Stanyan	3	W	0.91		*	19.2	B		
	Stanyan	Divisadero	3	E	0.91		*	14.9	C		

Table II

Results of Level of Service Monitoring - Arterials - P.M.

Name	From	To	Class	Travel Dir.	Length (mi)	AvSp 91	LOS 91	AvSp 92/3	LOS 92/3	AvSp 95	LOS 95
Van Ness/ SVN	Lombard	Washington	3	S	0.58		*	17.7	C		
	Washington	Lombard	3	N	0.58		*	13.2	C		
	Washington	Golden Gate	3	S	0.51	4.6	F	11.7	D	7.0	E
	Golden Gate	Washington	3	N	0.51		*	15.1	C		
	Golden Gate	13th	3	S	1.21	4.6	F	6.9	F		
	13th	Golden Gate	3	N	1.21		*	13.7	C		
	13th	Army	3	S	1.39	12.6		18.2	C		
	Army	13th	3	N	1.39			22.4	B		
Washington	Drumm	Kearny	3	W	0.28		*	10.3	D	12.5	D
West Portal	Ulloa	Sloat	3	S	0.38		*	18.2	C		
	Sloat	Ulloa	3	N	0.38		*	17.1	C		

NOTE: Average Speed (AvSp) is an indication of the average travel time. All sample times for each segment were averaged to obtain the AvSp.

* indicates the Level of Service 'C' or better for that particular segment.

~ indicates an 'overlap' in the segments because of the change in the segmentation boundaries from 1991.

Table III
Results of Level of Service Monitoring - Freeways - A.M. Peak

INBOUND

Route	From	To	Travel Direction	Length (mi)	AvSp 91	LOS 91	AvSp 93	LOS 93	AvSp 95	LOS 95
I-280	C & C Limit	US 101	E	4.14	22.9	F	43.0	E	27.3	F
	U.S. 101	6th/Brannan	NE	3.36	section closed		29.1	F		
US 101	C & C Limit	I-280	N	1.8	10.9	F	47.2	D	31.0	E
	I-280	I-80	N	2.3	21.4	F	21.2	F		
	I-80	Fell/Laguna	NW	1.6	18.7	F	45.4	E	44.8	E
I-80	Treasure I.	Fremont	S	2.13	17.5	F	32.2	E	26.5	F
	Fremont	US 101	SW	2.13	48.1	D	33.3	E	37.9	E

OUTBOUND

Route	From	To	Travel Direction	Length (mi)	AvSp 91	LOS 91	AvSp 93.0	LOS 93	AvSp 95	LOS 95
I-280	6th/Brannan	US 101	W	3.4	section closed		51.9	D	46.4	D
	US 101	C & C Limit	SW	4.1	55.7	C	57.5	B		
US 101	Fell/Laguna	I-80	S	1.3	13.5	F	17.9	F		
	I-80	I-280	S	2.3	45.8	E	53.6	D	36.4	E
	I-280	C & C Limit	S	2.1	53.3	D	45.6	E	36.3	E
I-80	US 101	Fremont	N	2.13	18.6	F	53.6	D	36.0	E
	Fremont	Treasure I.	NE	2.13	50.6	D	50.8	D	39.9	E

Table IV
Results of Level of Service Monitoring - Freeways - P.M. Peak

INBOUND

Route	From	To	Travel Direction	Length (mi)	AvSp 91	LOS 91	AvSp 93	LOS 93	AvSp 95	LOS 95
I-280	C & C Limit	US 101	E	4.14	54.9	C	59.1	B		
	U.S. 101	6th/Brannan	NE	3.36	section	closed	46.3	D	51.0	D
US 101	C & C Limit	I-280	N	1.81	20.6	F	72.4	A		
	I-280	I-80	N	2.28	24.6	F	45.8	E	31.8	E
	I-80	Fell/Laguna	NW	1.64	12.2	F	15.3	F		
I-80	Treasure I.	Fremont	S	2.13	27.5	F	26.3	F		
	Fremont	US 101	SW	2.13	18.6	F	21.5	F		

OUTBOUND

Route	From	To	Travel Direction	Length (mi)	AvSp 91	LOS 91	AvSp 93.0	LOS 93	AvSp 95	LOS 95
I-280	6th/Brannan	US 101	E	3.36	section	closed	22.9	F		
	US 101	C & C Limit	SW	4.14	51.9	D	56.6	B		
US 101	Fell/Laguna	I-80	S	1.32	18.8	F	13.4	F		
	I-80	I-280	S	2.28	31.6	E	46.3	D	47.2	D
	I-280	C & C Limit	S	2.13	48.1	D	51.1	D	30.8	E
I-80	US 101	Fremont	N	2.13	19.0	F	25.9	F		
	Fremont	Treasure I.	NE	2.13	29.3	F	37.7	E	34.6	E

APPENDIX V

Current Land Use Impacts Analysis Guidelines

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GUIDELINES FOR ENVIRONMENTAL REVIEW: TRANSPORTATION IMPACTS

July 1991

City and County of San Francisco
Department of City Planning

Contents

Introduction and Overview of Process 1

Analysis Guidelines

1. Project Description 5
2. Project Setting 6
3. Travel Demand Analysis 7
4. Transportation Impacts Analysis 8
    A. Traffic Impacts 8
    B. Transit Impacts 9
    C. Parking Impacts 10
    D. Pedestrian Impacts 11
    E. Freight Loading and Service Impacts 11
    F. Construction Impacts 12
5. Appropriate Transportation Mitigation Measures 13
6. Appendices for Inclusion in Transportation Reports 14

Technical Appendices to Guidelines

1. Trip Generation Rates for Typical Land Uses 15
2. Percent Work/Non-Work Trip Split 16
3.1 C-3 Office Journey-to-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 17
3.2 C-3 Non-Office Journey-to-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 18
3.3 C-3 Non-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 19
3.4 SOMA/Mission Bay Office Journey-to-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 20
3.5 SOMA/Mission Bay Non-Office Journey-to-Work Trips and Non-WorkTrips Based on P.M. Peak Period Residential Distribution and Mode Split 21
3.6 Van Ness Avenue Commercial Journey-to-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 22

3.7 Van Ness Avenue Commercial Non-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split 23
3.8 Van Ness Avenue Resident Trips Based on P.M. Peak Period Residential Distribution and Mode Split 24
3.9 Trip Distribution and Modal Split for Chinatown 25
3.10 Commercial Trip Modal Splits for Districts Surveyed in the Neighborhood Commercial Rezoning Study 26
4.1 Intersection Level of Service Analysis Methodology 27
4.2 Greater Downtown San Francisco 1985-2000 Traffic Growth Rates 29
5.1 Parking Demand Calculations for Non-Downtown and Residential Projects 30
5.2 Parking Demand Calculations for C-3, SOMA and Mission Bay Projects 32
5.3 Standard Language for Parking Section of Transportation Impacts Chapter of Office and Mixed Use Commercial Projects in C-3, SOMA and Mission Bay 33
6. Typical Transportation Mitigation Measures for the Downtown Area 35
7. Freight Delivery and Service Vehicle Demand 38
8. Transportation Study Scope of Work Acknowledgement and Approval Form 41
9. Year 2000 P.M. Peak Hour and P.M. Peak Period Modal Shares for Outbound Travel From Downtown and Vicinity 42

Introduction and Overview of Process

These guidelines have been prepared to aid consultants in preparing transportation analysis for environmental evaluation, both Environmental Impact Reports and Negative Declarations. In all cases that a transportation study is required for environmental analysis, a separate transportation report is to be prepared based on these guidelines, as background for the Negative Declaration or EIR.

The Department will make a determination whether a transportation study and report is necessary. Generally, a transportation report will be required if one or more of the following apply.

1) The project would potentially add at least 50 P.M. Peak Hour person trips;

2) The project would potentially increase existing traffic volumes on streets in its vicinity by at least 5 percent;

3) The project would potentially impact nearby intersections and/or arterials which are believed to presently operate at LOS "D" or worse;

4) The project would provide parking which would appear likely to be deficient, relative to anticipated project demand, by at least 20 percent;

5) The project has elements which have potential to adversely affect transit operations or the carrying capacity of nearby transit services;

6) The project has elements which have potential to adversely affect pedestrian safety or the adequacy of nearby pedestrian facilities;

7) The project would not fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls exceed ten daily.

Department staff will use discretion in determining whether a transportation study is needed in special circumstances that may not fit the above criteria.

This set of guidelines updates and revises the September 1983 guidelines for downtown analyses and the April 1988 guidelines for neighborhood projects. It reflects the most current data for San Francisco travel characteristics, based on the assumptions used for the Mission Bay, South of Market and Van Ness Avenue EIRs, and other recent environmental analyses.

These guidelines supersede all previously published transportation analysis guidelines. It must be noted that these are only guidelines. It must not be assumed that the Information provided herein constitutes a complete scope of work for any transportation analysis.

For clarification, the following represents an overview of the process involved in the preparation of a transportation analysis for environmental review purposes. No estimate or assumption is made or inferred regarding time lines for the various steps.

1) The project sponsor or a designated representative files an Environmental Review (EE) application with the Department. Once the application is considered complete by the Department a case number is assigned and a staff person from the Department's Office of Environmental Review (OER) is designated as the coordinator for environmental review. This individual will be different than the staff person handling any review necessary for other permit approval, but will coordinate with other Department staff.

2) A scoping meeting is held with the OER staff coordinator (other Department staff may also be involved), the project sponsor and the environmental consultant hired by or being considered by the project sponsor. The scoping meeting will determine the specific issues to be examined in the environmental review process.

3) If the Department determines that a transportation study is required, the consultant or its subconsultant will meet with the Transportation staff of the Department to determine the specific transportation issues to study and determine other parameters as defined In these guidelines. The consultant then prepares a draft transportation analysis scope of work for Departmental review, revision if necessary, and final approval. No work should be initiated by the transportation consultant until a written scope of work has been approved by the Department, including both the Transportation Section and the Office of Environmental Review (OER), by transmittal to the consultant of the form shown in Appendix 8.

   The Department will make every reasonable effort to anticipate and include in the scope of work typical concerns of other City agencies. However it is not possible for the Department to anticipate in advance all Issues and concerns which may later be raised by other Departments such as Muni or the Department of Parking and Traffic. Ultimately the scope of work may need to be revised after approval such that it adequately addresses the issues raised by all City agencies. Any contractual arrangement between the project sponsor and its consultant preparing the transportation report should reflect flexibility to address other Departments' concerns as they are raised.

Department staff should be contacted to discuss the appropriate work scope only after the project applicant has filed an acceptable Environmental Evaluation with the Department.

4) The consultant will do special studies, such as transportation analysis, and may prepare an Initial Study, so that OER may determine whether the project will need a Negative Declaration or an EIR.

5) Based on the approved scope of work, the consultant (or its subconsultant) conducts the analysis required independent of the project sponsor, and submits drafts directly to the Department for review, comment and approval. It is recognized that more than one submittal of preliminary transportation findings will normally be necessary in order to achieve a satisfactory final transportation report. It is expected that the consultant will work closely with Department transportation and OER staff to ensure that all recommended modifications to preliminary draft submittals are accomplished in a timely fashion. It is expected that, under normal circumstances, up to three drafts of a transportation study may be required before the Department accepts it as final.

   In the event that the consultant is unable to produce an acceptable final transportation report within three submittals, absent extenuating circumstances beyond the control of the consultant, the Department will take additional time and exercise greater scrutiny in its review of work submitted by that consultant for future projects, resulting in significant delays to the project sponsor.

6) Pertinent information from the final transportation report will be summarized for inclusion in an EIR or Negative Declaration. The specific information to be extracted and summarized, and the manner in which this information is to be presented in the EIR or Negative Declaration, will be determined on a case-by-case basis under the direction and guidance from the OER staff person assigned to the project.

The selection of the transportation consultant is at the discretion of the project sponsor, contingent upon submittal of an acceptable work scope to Department staff. The consultant's work effort is, however, to be entirely under the direction of the assigned Department staff. All submittals are to be made directly to the Department's Office of Environmental Review. Copies of the draft transportation report will be made available to the project sponsor only in very unusual circumstances, and any comments by the sponsor must be directed to Department staff, not the transportation consultant. The consultant is expected to respond fully to direction by Department staff without interference from the project sponsor or its representatives.

The role of the project sponsor and its representatives during the preparation of the transportation report should be limited to provision of details concerning the project, response to recommended changes affecting project circulation, and indication of support or lack of support for recommended mitigation measures and other transportation improvements.

Transportation analysis is often a complex and lengthy process. The Department strongly advises that it begin as early as possible, to avoid unnecessary delays.

Analysis Guidelines

Each transportation report for any project is to follow a consistent format, as presented here, and include all of the elements and information presented in these guidelines.

1. Project Description

All analyses must include a detailed project description. This information is to be presented as the first section of the document.

The project description must include the following information:

- Case file number for the project, as assigned by the Department.
- Location of the project site - address, Assessor's Block and Lot number(s), cross streets.
- Lot area, and existing and proposed zoning.
- Existing and proposed total square footage for each land use type and the number of units for residential, hotel/motel, and live/work projects, including net changes in each type of use.
- Existing and proposed estimated number of employees and/or residents by type of use, including net changes (Refer to Appendix 3 for employment and residential densities by land use).
- Description and plans for existing and proposed use (if any) of public rights of way by present or proposed uses, either above or below grade (e.g. air rights, surface or subsurface revocable permits), including sidewalk width changes, changes in width or number of traffic lanes, function of lanes in terms of traffic channelization, and direction of travel.

- Detailed plans showing vehicular and pedestrian site access, including location and width of curb cuts for both existing and proposed uses, and proposed internal vehicular circulation, presented in standard architectural or engineering scale.

- Identification of all approval actions required by City departments, including use permits, variances, encroachment permits, changes in public rights-of-way.

2. *Project Setting*

The setting information shall be presented immediately following the Project Description, as a discrete chapter or report section. The goal is to provide a brief but complete description of existing transportation infrastructure and conditions in the vicinity of the project (generally a radius of two blocks or up to one quarter mile). Any quantitative information necessary to make comparisons between existing conditions and those resulting from project implementation and cumulative development should be limited to the project impacts discussions.

The specific perimeters of the study area, for both setting and project impacts analysis, are to be confirmed with Department staff within the context of approval for a scope of work.

The Setting section shall include the following text information:

- Street designations as provided in the Master Plan (Major or Secondary Thoroughfares, Transit Preferential Streets, Bicycle Routes, etc.) including description of number and width of lanes, direction of flow, presence of transit preferential lanes or peak period tow-away lanes affecting roadway travel capacity.

- Access to regional highways and freeways, including location of, distance from, and route to and from on-ramps and off-ramps.

- Description of public transit routes operating on streets within the study area, by operator function (local, express, crosstown, etc.), service areas, hours of service of each route, and type of vehicle (diesel coach, trolley bus, streetcar/subway, etc.). For projects subject to Code Section 321, the report must identify, by operator, all lines within 1/4, 1/3, and 1/2 mile radii of the site.

- Official (legislated, available from Department of Public Works, Maps and Surveys), actual and effective widths of sidewalks immediately adjacent to the project site.

- Characteristics of parking within the study area (typically within a two block radius of the site, but as determined in the approved scope of work), including number of on-street parking spaces, control of on-street parking (e.g. meters, signed for time limit, neighborhood residential permit parking, etc.), number of off-street parking facilities and spaces, and whether off-street parking is provided as independently-accessible stalls, or tandem/stacked valet operation. Any special circumstances affecting the availability of parking in the vicinity of the proposed project (e.g. periods of peaking in parking demand, institutional and other large sources of localized parking demand, or the area's relative degree of parking need as documented in the 1985 Neighborhood Parking Plan or other relevant studies) are to be noted.

The Setting section shall also provide graphics, including:

- Street maps of the study area showing: street names, number and direction of lanes; transit service by line number and with stop locations identified; and location and amount of parking facilities. For projects subject to Code Section 321, the transit map is to show 1/4, 1/3, and 1/2 mile radii lines.

3. *Travel Demand Analysis*

Net new travel demand generated by the project is to be estimated, based on the difference between existing and proposed land uses. Person trip generation rates per employee, unit of square footage for each land use, or other unit of measure as shown in Appendix 1, are to be used.

Each analysis should apply these trip generation rates individually to existing and proposed uses, and show the difference ("net new") by land use and in aggregate.

The Travel Demand Analysis is to include the following, unless otherwise directed in the work scope:

- Project trip generation (24-hour, P.M. Peak Period and P.M. Peak Hour) by land use for existing uses and the project; and

- Tables showing net new person trips distributed to various directions of travel, and assigned to the appropriate modes (auto, transit, walk and other). Modal assignment should also be calculated for daily, P.M. Peak Hour and P.M. Peak Period in all situations (show OUTBOUND ONLY for projects in C-3 District, SOMA and Mission Bay projects).

Note that the weekday P.M. Peak Period is generally 4:00-6:00, and counts will be conducted at least during this period. For projects in the greater downtown, the P.M. Peak hour is 4:30-5:30. For projects in other areas the traffic counts will show the actual peak hour for adjacent streets. The Department may also request counts for different times to reflect the peak period of trip generation by the land use if, based on informed knowledge of the project and its vicinity, it seems reasonable to assume that conditions during such time may be worse than during typical weekday P.M. Peak Hour or Peak Period.

Previous analyses have shown that work and nonwork travel have different geographic distributions and mode splits. Appendix 2 gives Work/Nonwork trip splits by land use. The trip distribution and modal splits shown in Appendix 3 are to be applied to work or non work travel components for the various land uses, by time period of analysis, in calculating the distribution and mode of total net project travel.

4. *Transportation Impacts Analysis*

Analysis for all projects is to be conducted for project-specific impacts, and for cumulative impacts.

A. *Traffic Impacts*

Traffic impacts text should begin with a concise discussion of the cumulative context. Year 2000(or other long-range horizon year) analysis is to assume a growth factor for "background" traffic,as specified in Appendix 4. Traffic generated by the project alone, and by all known projectsapproved or under formal review in the general vicinity of the project site, are to be expressed asa percentage of this overall growth factor. If the percentage seems to be so high as to represent an unreasonable share of the anticipated horizon year growth or exceed the overall growth factor,the consultant will need to discuss the issue with Department staff to determine the appropriate methodology.

Specific methodology guidelines are provided in Appendix 4. The specific intersections to be analyzed will be identified in the approved scope of work for the transportation analysis.

Intersection Level of Service analysis for P.M. Peak Hour (unless other periods are also specified in the work scope), including a table showing comparison for each identified intersection between existing, existing plus project, and a future horizon year (inclusion of project traffic is assumed, not additive for horizon year analysis).

B. Transit Impacts

In the case of downtown projects, year 2000 conditions for the Muni and regional transit screenlines for outbound travel, as expressed in the Mission Bay FEIR, are to be used to describe the cumulative context. Similar to traffic impacts analysis, the net new transit trips generated by the project should be cited, and also expressed as a percentage of cumulative growth by operator.

For projects outside of the C-3, SOMA and Mission Bay districts, assessment of P.M. Peak Hour and Peak Period conditions for transit operations should reflect travel patronage distributed among the various lines serving the vicinity of the project site, but not include a line-by-line analysis. The aggregation would be expressed as the averaged load factor for all lines serving the project vicinity (e.g. if the project is served by the 71, 7, 6, 33, and N-Judah lines, express the load factor as an average of all 5 lines). Neighborhood projects need not assume cumulative patronage growth for any future horizon year.

Load factors for the aggregated lines are to be cited for existing, existing plus project and, for downtown projects, the horizon year, during P.M. Peak Hour and Peak Period conditions. It should be noted whether the project is upstream or downstream from the Maximum Load Points (MLPs) for Muni lines serving the project.

The estimated number of trips which transfer between regional carriers and Muni lines serving the project should be included in the Muni assignment.

For downtown and vicinity projects, BART demand for West Bay and East Bay directions of travel should be shown separately.

C. *Parking Impacts*

Project parking demand is to be calculated for both long-term and short-term users for commercial projects, and for resident parking demand in projects which include housing.

In some situations (e.g. when overlapping work shifts of the project or adjacent uses cause an accumulation of parking demand greater than the daily average total), accumulated peak parking demand and its impact should also be quantified.

If a proposed project would displace existing parking, characteristics of such parking should be accounted for as follows:

(1) *the amount of parking reserved for the exclusive use by employees and visitors of uses currently on the site; and*

(2) *the amount of on-site parking which is considered required accessory parking to off-site land uses.*

(3) *the amount of parking available to the general public, characterized separately by long term (monthly or other leases) and short term (available at hourly or daily rates);*

Project parking demand (including, if appropriate, demand for parking displaced) should be compared to Planning Code requirements, and to the amount of parking to be provided.

Impacts of any deficiency in parking supply relative to estimated demand, including current users of public parking to be displaced by the project, should be quantified in terms of the estimated resultant increase in occupancy of available on street and off street facilities.

The amounts of bicycle and handicapped parking to be provided are to be cited and compared with Code requirements (including State and other as appropriate for handicapped parking) and estimated demand.

Identification of any parking access affecting a Transit Preferential Street, or any street identified in the Master Plan for full or partial priority for pedestrians, and any potential conflicts affecting transit, pedestrian or vehicular flow.

Any special circumstances affecting the availability of parking in the vicinity of the proposed project as identified in the Setting Section are to be taken into consideration in the analysis and noted.

D. *Pedestrian Impacts*

Pedestrian trips generated by the proposed project should be estimated for P.M. Peak Hour, midday, and/or the proposed project's peak period of trip generation.

Level of service conditions when appropriate for existing, existing plus project scenarios are to be calculated according to direction from Department OER and Transportation staff. Pushkarev and Zupan pedestrian Level of Service standards and methodology for Average Flow Characteristics Related to Flow In Platoons, or 1985 Highway Capacity Manual methodology (Chapter 13), is considered acceptable for the analysis; appropriate references are to be included.

In the downtown area, growth factors used for future traffic analysis are also to be used to determine growth in pedestrian travel.

Midblock pedestrian Level of Service analysis may, in some situations, be requested in addition to Level of Service analysis at pedestrian crossing (intersection) locations.

E. *Freight Loading and Service Impacts*

Off-street truck loading requirements should be specified according to the Planning Code.

Project truck loading demand and service rate for peak loading period and the entire day should be estimated, using the data shown in Appendix 7, and compared with Planning Code requirements and proposed on-site facilities.

The location, number and dimensions (including vertical clearance) of all spaces provided for freight and service functions, including van size spaces substituted for full size spaces, are to be specified. The location of freight elevators relative to all loading and service parking areas is to be shown, with clear identification of the circulation path between the loading/service stalls and elevators.

If demand exceeds supply for "average" conditions, especially if no off-street loading facilities are proposed to be included with the project, quantification of resulting impacts (e.g. time of day, number of instances and duration of double-parked vehicles) should be made, and details should be provided regarding how service needs would be accommodated.

If truck movements would require backing into or out of the site on public rights of way, the resultant delays to traffic, transit vehicles and pedestrians are to be characterized.

Identification of truck loading access affecting a Transit Preferential Street, or any street identified in the Master Plan for full or partial priority for pedestrians, and any potential conflicts affecting transit, pedestrian or vehicular flow.

In the case that a proposed project would rely on curbside yellow loading zones, an occupancy and turnover analysis is to be conducted for existing curbside loading spaces in the immediate vicinity of the project site, to estimate the probable availability of such spaces to serve the needs of the proposed project, primarily during the 10:00 A.M. to 3:00 P.M. weekday period but also inclusive of additional times as warranted for the specific use(s) proposed.

If applicable, the extent of taxi, tour bus, or other types of passenger loading and unloading needs should be specified including details regarding how these functions would be served. Where a porte cochere or other off-street passenger loading area is required or provided, include plans showing location, lanes, circulation, and all dimensions. Any plans to seek colored marked curbside areas from the Department of Parking and Traffic should be noted.

F. Construction Impacts

The number of daily and P.M. peak period construction truck trips, by construction phase, should be cited.

Closure or temporary use of pedestrian ways, parking lanes or traffic lanes is to be identified, indicating the extent and duration of such closure or temporary use. Impacts associated with such occupation of public rights of way should be quantified, in terms of parking lost, effects on transit operations and loading, or temporary degradation in levels of service for intersections and/or pedestrians.

In large projects, the staging of construction trucks for materials delivery should be cited, and parking needs of construction workers identified.

5. *Appropriate Transportation Mitigation Measures*

Transportation reports are frequently used not only for environmental evaluation but also in the conditional use and other permit processes. It is important to recognize the differences between these processes.

Mitigation measures required to deal with impacts determined to be environmentally significant according to CEQA standards should be clearly identified. When CEQA based mitigation is included as a condition of approval for a project, a monitoring program for each mitigation measure is also required and must be cited.

There are also cases in which no significant transportation impacts are identified and mitigation is not required. In these cases, there may be desirable measures to improve transportation conditions which may be recommended and subsequently included as conditions of project approval. Such measures are NOT to be termed as "mitigation."

Mitigation measures required under CEQA should be clearly distinguished from recommended transportation improvements which are not related to CEQA requirements.

Whenever either type of measure is identified, the following must be cited:

- If implementation would be the responsibility of the project sponsor, indicate whether the project sponsor supports or fails to support each specific recommendation.
- If implementation would be the responsibility of the City or another agency, the responsible department or agency should be identified and its position on each recommendation should be stated.

Typical transportation mitigation measures for downtown area projects, to address significant impacts as defined by CEQA standards, are shown in Appendix 6. While some of these may be appropriate for projects outside of the downtown area, mitigation measures for such projects would generally be a function of the specific conditions and impacts identified by the transportation study for each project.

6. *Appendices for Inclusion in Transportation Reports*

The following appendices are to be included with all transportation analyses:

- Complete sets of all traffic and pedestrian counts.
- Complete sets of all traffic and pedestrian Level of Service calculations.
- Complete sets of all analysis assumptions (including trip generation rates, transit patronage and capacities, parking turnover rates, mode splits, etc.).
- Intersection LOS definitions and descriptions.
- Transit LOS definitions and descriptions, including photographs of typical conditions representing each LOS.
- Pedestrian LOS definitions and descriptions, including photographs of typical conditions representing each LOS.
- Transportation Study Scope of Work Acknowledgement and Approval form, completed by the Department and showing approval, and a copy of the approved scope of work.

APPENDIX 1

Trip Generation Rates for Typical Land Uses

		Daily Person Trip Rate		P.M. Peak Percentage of Daily Trips	
Land Use	**Density(1)**	**Per Employee**	**Per Unit Land Use(2)**	**Peak Hour**	**Peak Period**
C-3 Primary Office					
Under 100,000 GSF	208	4.08	19.6	9.5	15.6
100,001-200,000	227	3.38	14.9	10.5	17.3
over 200,000 GSF	276	3.06	11.1	11.3	18.6
C-3 Secondary Office	276	5.0	18.1	6.6	11.5
Goverment Office	172	12.2	71.0	6.0	10.0
Back Office	210	3.4	16.2	12.5	20.5
Other Office	276	5.0	18.1	8.5	14.0
General Convenience					
Retail	350	52.5	150	4.0	8.0
Sales/Showrooms					
Composite Rate	721	22.0	30.5	6.6	12.0
Bulk Sales	719	33.6	46.7	6.6	12.0
Showrooms	830	5.0	6.0	6.6	12.0
Services					
Composite Rate	655	10.0	15.2	3.7	11.0
Service Delivery	1234	6.5	5.3	3.7	11.0
Service Repair	775	23.8	30.7	3.7	11.0
Service Institutional	248	7.1	28.6	3.7	11.0
Distribution	1234	12.6	10.2	3.2	6.5
Manufacturing	567	4.5	7.9	12.4	19.0
Eating/Drinking					
Composite Rate			600.0	13.5	27.0
Quality Sit Down			200.0	13.5	27.0
Fast-Food			1400.0	13.5	27.0
C-3 Hotel	908	15.8	17.4	3.2	7.0
Hotel/Motel	822	17.9	21.8	5.5	11.0
Athletic Clubs			57.0	10.5	
Billiards Parlors			2.6(3)		40.0
Daycare Centers			67.0	18.0	N/A
Residential					
Single Family/2+ Bdrm. Multi-Unit			10.0(4)	17.3	21.0
1 Bdrm./Studio			7.5(4)	17.3	21.0

NOTES:
(1)Gross Square Feet per employee
(2)Trips per 1,000 GSf unless otherwise specified
(3)Trips per billard table
(4)Trips per unit

Source:
Mission Bay FEIR
South of Market FEIR
Trip Generation, 5th Edition, ITE

APPENDIX 2

Percent Work/Non-Work Trip Split

	24-Hour	P.M. Peak Hour	P.M. Peak Period
	Work/Non-Work	Work/Non-Work	Work/Non-Work
C-3 Districts			
Primary/Back Office	36/64	83/17	83/17
Government Office	20/80	83/17	83/17
Hotel	12/88	60/40	64/36
Retail	4/96	4/96	4/96
Non C-3 Districts			
Primary Office	36/64	83/17	78/22
Back Office	53/47	83/17	78/22
Government Office	20/80	83/17	78/22
Convenience Retail	8/92	8/92	8/92
Hotel/Motel	10/90	45/55	29/71
Sales/Showrooms	8/92	33/67	23/77
Service	18/82	75/25	33/67
Distribution	14/86	75/25	75/25
Manufacturing	40/60	67/33	60/40
Industrial/Warehouse			
Automotive Parking	43/57	43/57	53/47
Residential	33/67	50/50	50/50

Source: Mission Bay FEIR, South of Market FEIR

For commercial/industrial uses, 100% of all work trips during P.M. peak, and 50% of all non-work trips during P.M. peak, are outbound.

For residential uses, all P.M. peak work trips and 33% of all P.M. peak non-work trips are inbound to the project; resident inbound/outbound trip directions may or may not correspond to peak outbound regional travel direction.

APPENDIX 3.1

C-3 Office Journey to Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	10%	Drive Alone	6%
		Carpool	3
		MUNI	42
		BART	1
		Walk	47
		Other	1
NW San Francisco	17%	Drive Alone	23 %
		Carpool	11
		MUNI	64
		Other	2
SE San Francisco	8%	Drive Alone	28 %
		Carpool	11
		MUNI	33
		BART	19
		Other	9
SW San Francisco	17%	Drive Alone	18 %
		Carpool	14
		MUNI	62
		BART	8
		Other	1
North Bay	11%	Drive Alone	28 %
		Carpool	14
		Vanpool	1
		Charter/Club Bus	4
		GG Bus	41
		Ferry	12
East Bay	27%	Drive Alone[1]	6 %
		Carpool[1]	8
		Vanpool	6
		BART[1]	56
		AC[1]	22
		Charter/Club Bus	1
		Ferry	1
Peninsula	6%	Drive Alone	23 %
		Carpool	24
		Vanpool	1
		MUNI	2
		BART	25
		SamTrans	9
		CalTrain	15
		Other	1
Internal to C-3	4%	Drive Alone	2 %
		MUNI	40
		BART	1
		Walk	55
		Other	2

[1] P.M. Peak modal splits to the East Bay have been adjusted to account for return trips on BART, AC Transit and Drive Alone modes by those who participate in "casual carpools " for their morning commute. As a result, shares for these three modes are higher and carpool modal share is less in the evening than those reflected in previous guidelines which generally reflected morning commute mode. Adjustments were based on recent published research and recent commute surveys, as referenced below.

Source: South of Market FEIR, Department transportation model inputs for C-3 District
"Casual Carpooling in the San Francisco Bay Area"; Steve Beroldo, Transportation Quarterly, January 1990
"1990 Year End Report to the City Planning Commission"s TMA of San Francisco, December 1990.

APPENDIX 3.2

C-3 Non-Office Journey to Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	11.4%	Drive Alone	5.2%
		Carpool	2.9
		MUNI	42.9
		BART	0.5
		Walk	46.9
		Other	1.6
NW San Francisco	20.3%	Drive Alone	23.1%
		Carpool	11.6
		MUNI	63.8
		BART	0.2
		Walk	0.7
		Other	0.6
SE San Francisco	13.2%	Drive Alone	27.6%
		Carpool	10.4
		Vanpool	1.6
		MUNI	32.9
		BART	19.0
		Walk	0.5
		Other	8.0
SW San Francisco	23.0%	Drive Alone	18.3%
		Carpool	10.8
		Vanpool	0.3
		MUNI	61.5
		BART	8.3
		Other	0.8
Peninsula	7.8%	Drive Alone	23.1%
		Carpool	24.59
		Vanpool	0.9
		MUNI	2.0
		BART	24.8
		SamTrans	8.5
		CalTrain	15.1
		Other	1.1
East Bay	11.6%	Drive Alone	5.9%
		Carpool	16.9
		Vanpool	6.7
		BART	47.8
		AC	22.0
		Charter	0.7
North Bay	2.7%	Drive Alone	27.8%
		Carpool	14.4
		Vanpool	2.3
		GG Bus	39.4
		Ferry	11.1
		Charter	4.8
		Other	0.2
Internal	10.0%	Drive Alone	2.1%
		Carpool	0.7
		MUNI	40.1
		BART	0.7
		Walk	54.5
		Other	1.9

Source: Mission Bay FEIR, Supporting Documentation Vol. VI, 1985 Screenline Forecasts

APPENDIX 3.3

C-3 Non-Work Trips Based on P.M. Peak Period Residential Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	1.0%	Drive Alone	8.9%
		Carpool	8.5
		MUNI	13.1
		BART	0.3
		Walk	68.1
		Other	1.1
NW San Francisco	1.0%	Drive Alone	22.4%
		Carpool	30.0
		MUNI	34.1
		BART	0.2
		Walk	10.4
		Other	2.9
SE San Francisco	2.0%	Drive Alone	29.4%
		Carpool	30.0
		MUNI	21.2
		BART	15.3
		Walk	2.0
		Other	2.1
SW San Francisco	2.0%	Drive Alone	20.7%
		Carpool	32.2
		MUNI	40.4
		BART	5.0
		Other	1.7
Peninsula	3.0%	Drive Alone	45.5%
		Carpool	27.5
		MUNI	3.0
		BART	9.0
		SamTrans	5.0
		CalTrain	9.1
		Other	0.9
East Bay	6.0%	Drive Alone	44.0%
		Carpool	17.5
		BART	24.3
		AC	14.2
North Bay	2.0%	Drive Alone	54.0%
		Carpool	22.2
		GG Bus	20.0
		Ferry	3.8
Internal	83.0%	Drive Alone	8.9%
		Carpool	8.5
		MUNI	13.1
		BART	0.3
		Walk	68.1
		Other	1.1

Source: Mission Bay FEIR, Supporting Documentation Vol. VI, 1985 Screenline Forecasts

APPENDIX 3.4

SOMA/Mission Bay Office Journey-To-Work Trips
Based on P.M. Peak Period Residential Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	6.5%	Drive Alone	22.9%
		Carpool	15.4
		MUNI	40.5
		Walk/Bike	21.2
NW San Francisco	5.3%	Drive Alone	26.5%
		Carpool	6.1
		MUNI	64.2
		Walk/Bike	3.2
SE San Francisco	16.4%	Drive Alone	37.3%
		Carpool	26.3
		MUNI	30.8
		BART	2.0
		Walk/Bike	2.3
		Other	1.3
SW San Francisco	16.9%	Drive Alone	22.8%
		Carpool	6.5
		MUNI	42.7
		BART	14.3
		Other	13.7
Peninsula	16.1%	Drive Alone	16.5%
		Carpool	19.8
		BART	11.6
		SamTrans	16.1
		CalTrain	30.2
		Charter Bus	5.8
East Bay	26.6%	Drive Alone	11.3%
		Carpool	31.8
		Vanpool	10.5
		BART	22.3
		AC	21.6
		Charter Bus	2.5
North Bay	10.1%	Drive Alone	13.5%
		Carpool	13.5
		GG Bus	52.1
		Ferry	11.0
		Charter Bus	9.9
Internal to SOMA and Mission Bay	2.1%	Drive Alone	22.9%
		Carpool	15.4
		MUNI	41.9
		Walk/Bike	19.8

Source: South of Market FEIR; extracted from Dept. model input tables for Subarea 2 within the SOMA study area, which represents the bulk of office space.

APPENDIX 3.5

SOMA and Mission Bay Non-OfficeJourney-to-Work Trips and Non-Work Trips Based on P.M. Peak Period Residential Distribution and Mode

	Distribution	Mode Split	
	Work/Non-Work		Work/Non-Work
NE San Francisco	5.9% / 3.2%	Drive Alone	21.6% / 33.0%
		Carpool	7.9 / 35.0
		Vanpool	0.7 / --
		MUNI	44.9 / 11.0
		Walk	24.7 / 16.0
		Other	0.2 / --
		Bart	-- / 2.0
		Bike	-- / 3.0
NW San Francisco	4.5% / 8.4%	Drive Alone	40.9% / 34.0%
		Carpool	14.6 / 36.0
		Vanpool	0.3 / --
		MUNI	43.0 / 24.0
		Walk	-- / --
		Bike	0.6 / 3.0
		Other	0.7 / 3.0
SE San Francisco	20.4% / 8.4%	Drive Alone	51.5% / 34.0%
		Carpool	7.4 / 36.0
		MUNI	33.1 / 24.0
		BART	3.8 / --
		Walk	0.7 / 3.0
		Bike	2.9 / 3.0
		Other	0.6 / --
SW San Francisco	15.0% / 8.4%	Drive Alone	45.3% / 34.0%
		Carpool	11.6 / 36.0
		MUNI	32.4 / 24.0
		BART	6.3 / --
		Walk	0.5 / 3.0
		Other	3.0 / --
Peninsula	18.1% / 3.2%	Drive Alone	60.1% / 48.0%
		Carpool	11.1 / 52.0
		Vanpool	0.2 /
		MUNI	0.2 /
		BART	9.4 /
		SamTrans	5.0 /
		CalTrain	12.8 /
		Charter	1.1 /
		Other	0.2 /
East Bay	21.9% / 1.1%	Drive Alone	29.0% / 48.0%
		Carpool	19.5 / 52.0
		Vanpool	4.0 /
		BART	34.3 /
		AC	11.2 /
		Charter	2.0 /
North Bay	11.0% / 5.3%	Drive Alone	31.9% / 48.0%
		Carpool	35.9 / 52.0
		Vanpool	0.2 /
		GG Bus	24.8 /
		Ferry	5.5 /
		Charter	1.7 /
Internal to SOMA and Mission Bay	3.2% / 61.0%	Drive Alone	19.2% / 33.0%
		Carpool	6.2 / 35.0
		Vanpool	0.4
		MUNI	43.8 / 11.0
		BART	2.0
		Walk	30.1 / 66.0
		Other	0.3 / 0.3(bike)

Source: South of Market FEIR, background documents for Department model inputs

APPENDIX 3.6

Van Ness Avenue Commercial Journey To Work Trips Based onP.M. Peak Period Trip Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	12.3%	Drive Alone	4.9%
		Carpool	7.9
		MUNI	43.4
		Walk	42.2
		Other	1.6
NW San Francisco	16.6%	Drive Alone	2.3%
		Carpool	14.8
		MUNI	61.0
		Walk	2.0
		Other	1.9
SE San Francisco	17.0%	Drive Alone	20.6%
		Carpool	17.5
		MUNI	48.0
		BART	11.8
		Walk	0.4
		Other	1.7
SW San Francisco	7.3%	Drive Alone	24.5%
		Carpool	16.4
		MUNI	53.8
		BART	3.9
		Other	1.4
Peninsula	18.3%	Drive Alone	41.5%
		Carpool	28.6
		MUNI	2.4
		BART	16.6
		SamTrans	8.1
		CalTrain	2.8
East Bay	19.0%	Drive Alone	23.3%
		Carpool	12.0
		Vanpool	4.1
		BART	52.4
		AC	8.2
North Bay	9.3%	Drive Alone	19.3%
		Carpool	24.8
		Vanpool	4.3
		GG Bus	45.6
		Ferry	4.0
		Charter/Club Bus	2.0
Internal to Van Ness Corridor	0.2%	Drive Alone	12.48%
		Carpool	0.7
		MUNI	27.3
		Walk	58.8
		Other	0.8

Source: Van Ness Avenue FEIR, Appendix I

APPENDIX 3.7

Van Ness Avenue Commercial Non-Work Trips
Based onP.M. Peak Period Trip Distribution and Mode Split

	Distribution	Mode Split	
NE San Francisco	13.0%	Drive Alone	37.4%
		Carpool	19.8
		MUNI	26.4
		Walk	14.0
		Other	2.4
NW San Francisco	26.7%	Drive Alone	45.8%
		Carpool	11.1
		MUNI	30.8
		Walk	10.0
		Other	2.3
SE San Francisco	18.1%	Drive Alone	50.9%
		Carpool	18.4
		MUNI	21.0
		BART	4.2
		Walk	3.6
		Other	1.9
SW San Francisco	4.2%	Drive Alone	47.5%
		Carpool	10.9
		MUNI	36.4
		BART	3.5
		Other	1.7
Peninsula	10.5%	Drive Alone	58.8%
		Carpool	28.5
		MUNI	0.2
		BART	7.0
		SamTrans	3.0
		Other	2.5
East Bay	14.7%	Drive Alone	43.9%
		Carpool	7.5
		BART	44.0
		AC	4.6
North Bay	5.8%	Drive Alone	43.4%
		Carpool	11.9
		GG Bus	40.0
		Ferry	4.7
Internal to Van Ness Corridor	7.0%	Drive Alone	13.8%
		Carpool	5.5
		MUNI	10.1
		Walk	69.8
		Other	0.8

Source: Van Ness Avenue FEIR, Appendix I

APPENDIX 3.8

Van Ness Avenue Resident Trips
Based on P.M. Peak Period Distribution[1] and Mode Split

	Distribution	**Mode Split**	
	Work/Non-Work		**Work/Non-Work**
NE San Francisco	59.1% / 12.7%	Drive Alone	14.9% / 20.9%
		Carpool	11.1 / 29.2
		MUNI	53.8 / 37.9
		Walk	18.4 / 8.8
		Other	1.8 / 3.2
NW San Francisco	17.4% / 9.2%	Drive Alone	37.7% / 18.1%
		Carpool	11.8 / 23.6
		MUNI	31.3 / 44.8
		Walk	16.7 / 10.4
		Other	2.5 / 3.1
SE San Francisco	9.2% / 6.6%	Drive Alone	45.2% / 17.7%
		Carpool	9.6 / 12.5
		MUNI	40.6 / 60.0
		Walk	2.4 / 1.8
		Other	2.2 / 8.0
SW San Francisco	2.7% / 5.4%	Drive Alone	66.7% / 10.4%
		Carpool	4.9 / 11.6
		MUNI	25.7 / 73.0
		BART	0 / 5.0
		Other	2.7 / 0
Peninsula	5.0% / 5.9%	Drive Alone	65.0% / 35.6%
		Carpool	15.5 / 17.3
		MUNI	1.8 / 0
		BART	10.0 / 40.1
		SamTrans	6.0 / 7.0
		Other	1.7 / 0
East Bay	5.3% / 1.6%	Drive Alone	70.0% / 35.1%
		Carpool	9.0 / 22.1
		BART	18.0 / 42.0
		AC	1.0 / 0.8
		Charter/Club Bus	2.0 / 0
North Bay	1.3% / 1.1%	Drive Alone	71.0% / 12.4%
		Carpool	17.5 / 87.6
		GG Bus	6.0 / 0
		Charter/Club Bus	5.5 / 0
Internal to Van Ness Corridor	0% / 57.5%	Drive Alone	0 / 4.4%
		Carpool	0 / 8.7
		MUNI	0 / 26.0
		Walk	0 / 58.8
		Other	0 / 2.1

Source: Van Ness Avenue FEIR, Appendix I

[1] Note that for work trips, geographic distribution represents trip origin location; all work trip destinations are within the Van Ness Avenue Corridor.

APPENDIX 3.9

Trip Distribution and Modal Split for Chinatown

Chinatown		Work Trips			Non-Work Trips	
		Distribution		Mode Split	Distribution	Mode Split
SF	NE	33%	Drive Alone	7%	26%	7%
			*Shared Ride	4%		16%
			Muni	14%		37%
			Walk	75%		36%
	NW	19%	Drive Alone	37%	15%	16%
			Shared Ride	7%		28%
			Muni	56%		56%
	SE	7%	Drive Alone	37%	5%	16%
			Shared Ride	7%		28%
			Muni	48%		55%
			Bart/Other Transit	8%		3%
	SW	25%	Drive Alone	37%	15%	16%
			Shared Ride	7%		28%
			Muni	49%		55%
			Bart/Other Transit	7%		3%
Peninsula		9%	Drive Alone	52%	17%	38%
			Shared Ride	16%		57%
			Bart/Other Transit	32%		5%
E. Bay		6%	Drive Alone	32%	6%	38%
			Shared Ride	23%		55%
			Bart/Other Transit	45%		7%
N. Bay		1%	Drive Alone	52%	4%	38%
			Shared Ride	16%		60%
			Bart/Other Transit	32%		2%

Source: Transportation Impact Analysis for Chinatown Rezoning, Jan 87, DCP

*Shared Ride Vehicle Occupancy Assumed at 2.7 persons per vehicle

APPENDIX 3.10

Commercial Trip Modal Splits for Districts Surveyed in the Neighborhood Commercial Rezoning Study

Modal distribution of person trips for projects in the Geary Street, Polk Street and Broadway NCD's only shall be shown among auto, transit, pedestrian, and other modes based on the following survey results from NCRS EIR, Appendix B.

	Geary Blvd.	Polk St.	Broadway
Drive	23%	24%	44%
MUNI	39%	11%	13%
Walk	26%	62%	33%
Other	2%	3%	11%
Average Auto Occupancy	2.1%	2.0%	2.6%

In all other NCD's or neighborhoods, mode splits shall be based on surveys of existing similar uses in the vicinity of the proposed project, or other means, as directed by Department staff through the work scope.

APPENDIX 4.1

INTERSECTION LEVEL OF SERVICE ANALYSIS METHODOLOGY

Level of Service analysis for existing conditions are to be based on traffic counts taken by the Department of Parking and Traffic not more than three years old, data in certified EIRs or background transportation studies supporting certified Negative Declarations for which the counts data is no more than three years old, and/or turning movement counts to be made by the consultant at each affected intersection. Copies of all counts used in the analysis, and level of service calculations, are to be included with the report as an appendix.

Level of Service analysis for existing conditions plus the project is to be based on an assignment of net new project vehicular trips compared to existing conditions for each of the affected streets and intersections in the study area.

Level of Service must also be estimated and shown for future conditions, with a horizon year approximately 10 years in the future. The future horizon year should be expressed as 2000, 2005, 2010, 2015, etc.; five year increments in the expression of the future year should be used. Analysis of future conditions will use a growth factor for travel in the general geographic area of the project site. This growth factor will generally assume that net new travel attributable to the project is included, such that it will not normally be necessary to add project travel to the growth rate.

Growth factors for three sectors of the downtown and vicinity, reflecting trip growth from 1985 through 2000, are shown in Appendix 4.3. The overall 15-year factor should be converted to an annualized factor, and the annual factor used to determine the growth rate for the portion of the 1985 - 2000 15-year period. (e.g. 1991 - 2000 growth factor would be 9 X annualized factor).

For other areas, analysis should incorporate impacts based on all identified area development that is reasonably foreseeable, growth identified and analyzed in relevant planning reports and accompanying environmental analyses (e.g. NCRS, Rincon Hill and Van Ness Avenue EIRs), and growth in through background travel (estimated by DPT Bureau of Traffic Engineering at one percent per year).

For projects located within neighborhoods for which a specific development framework has been elaborated in previous environmental analyses, the cumulative transportation analysis for the project shall encompass the time period which corresponds to the appropriate areawide study analysis. Where no such analysis has been completed, a 10-year time frame should be assumed for cumulative analysis. Identification of specific area projects and relevant growth rates for through background travel shall be verified with Department OER and Transportation staff prior to the initiation of the analysis.

Standard methodologies to calculate intersection Level of Service are to be employed as follows:

Signalized Intersections - TRB Circular 212 Planning Methodology

In some situations it may be necessary to adjust the capacity of the intersection to account for localized constraints. Thiswould be done by conducting a saturation flow analysis where, based on informed knowledge of the study area it may be determined that standard values of the Circular 212 will require adjustment. The scope of work will note that an adjusted Intersection capacity will be determined by the traffic consultant on the basis of the saturation flow analysis prior to submission of the first draft report. In other cases, it may become apparent after initial staff review of the calculations that a saturation flow analysis is warranted to determine effective intersection capacity.

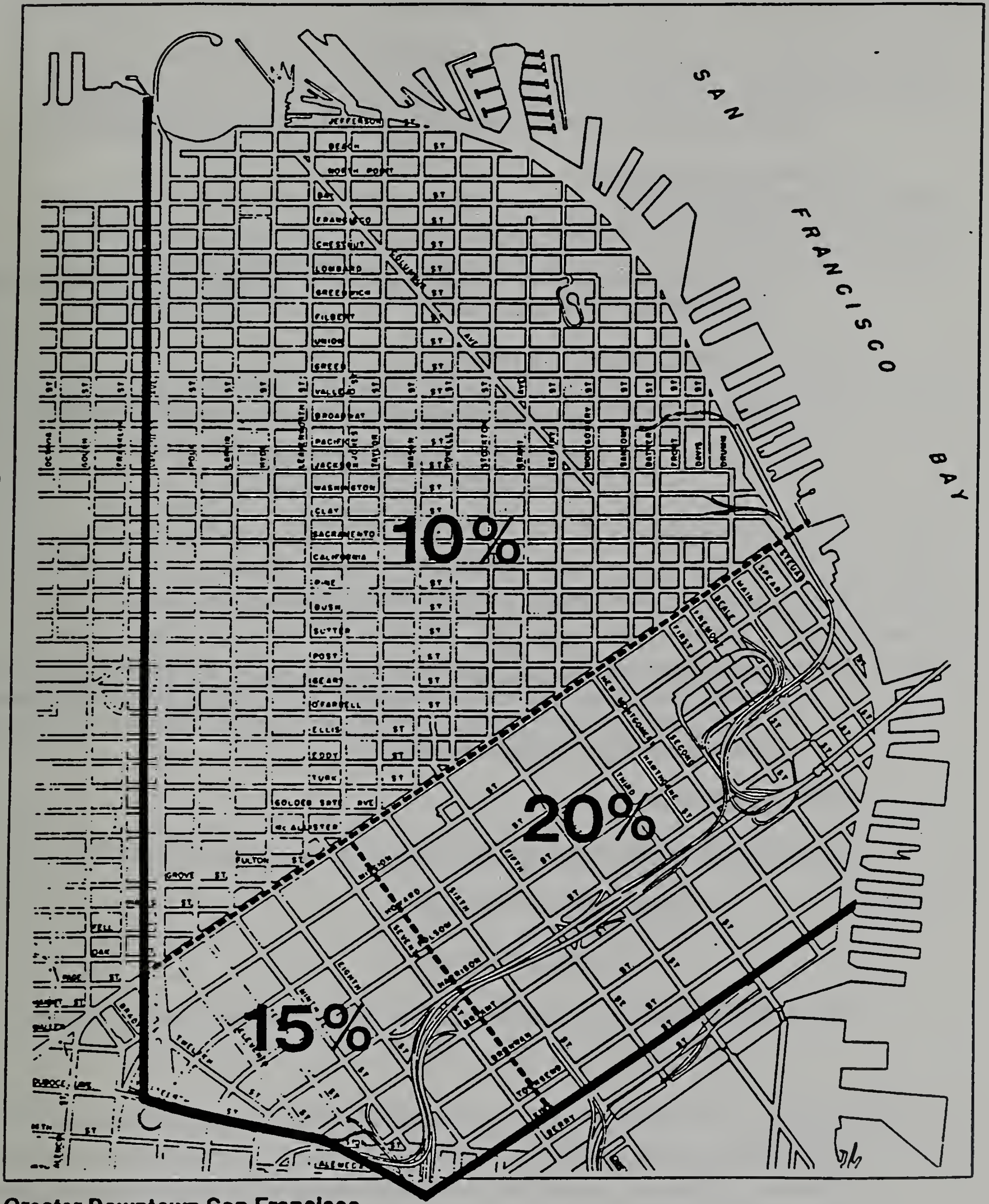
Unsignalized Intersections (all-way stop sign control) - TRB Circular 373

Note: Circular 373 is to be used only for methodology described therein for unsignalized all-way stop intersections; methodologies for other types of intersections shall be as specified in these Departmental guidelines.

T Intersections with single stop control, and intersections with 2-way stop sign control

1985 Highway Capacity Manual Unsignalized Method (Chapter 10).

APPENDIX 4.2



Greater Downtown San Francisco
1985 - 2000 Traffic Growth Rates

S. F. Department of City Planning 5/90

Source: Derived from Mission Bay and South of Market EIR's.

APPENDIX 5.1

PARKING DEMAND CALCULATIONS FOR NON-DOWNTOWN AND RESIDENTIAL PROJECTS

1. Commercial Parking Demand

A. Commercial Long-Term Parking Demand

In general this is equivalent to the total number of journey-to-work vehicle trip ends generated by the project (both drive-alone and rideshare), divided by 2.

B. Commercial Short-Term Parking Demand

Projects outside of the C-3 Districts, SOMA and Mission Bay are to use the following equation.

$$\frac{\left[\dfrac{\left(\dfrac{\text{Total project non-work auto person trip ends}}{\text{1.2 persons per vehicle}}\right)}{\text{2 one-way auto trips}}\right]}{\text{Parking turnover rate}}$$

The turnover rate may vary for individual projects and is to be based on surveys of parking turnover for established uses comparable to those of the proposed project, preferably within the same general area. However, a turnover rate of greater than 5 per day should not be used unless supported by independent surveys reviewed and accepted by Department staff.

2. Resident Parking Demand

New residential projects should generally use the following ratios to estimate parking demand.

1.1 vehicles/studio or 1-bedroom apt.

1.5 vehicles/multiple bedroom unit

(Source: Recht Hausrath Assoc. 1986 downtown resident survey, Residential Conservation Rezoning Study, DCP, 1990)

Note: The foregoing resident parking demand ratios are highly generalized, averaged rates derived from surveys of a variety of housing types and locations in San Francisco. The transportation consultant would normally be expected to use these average ratios. However, there may be circumstances, such as the type, expected occupancy, or location of the housing, which justify the use of different ratios. In situations that the Department, in the course of establishing the transportation work scope, concurs that such circumstances exist, the consultant will be authorized to conduct independent surveys of resident auto ownership for similar types of projects to establish and support different ratios.

The Department will use these surveys and its own surveys carried out subsequent to publication of these guidelines to refine and develop more specific rates for a variety of housing types. When such revised standards are developed they shall be made available to the consultant at the time a work scope for a project proposal is outlined pending amendment of this document.

In certain circumstances it may be necessary to determine both estimated parking demand for the proposed project and existing residential units on the project site and/or on the general project vicinity. Estimation of parking demand for the proposed project must use one of the methods previously described.

To estimate parking demand of existing residential uses, 1980 U.S. Census data (1990 when it becomes available) may be used in neighborhood situations, for the tract in which the proposed project is located plus abutting tracts of similar residential character. If 1980 data is used, the average auto ownership rate as shown for these tracts should be multiplied by a factor of 1.14, to reflect increasing auto registration in San Francisco since 1980 and the observed tendency for occupants of newly constructed dwelling units to have greater auto occupancy rates than those of older units.

APPENDIX 5.2

PARKING DEMAND CALCULATIONS FOR C-3, SOMA and MISSION BAY PROJECTS***

1. PROJECT PARKING DEMAND

1A. *Project long term*

$\frac{\text{Project office GSF}}{20{,}000}$ project rideshare demand

+ plus

$\frac{\text{Project office GSF}}{275\ \text{GSF/employee}} \times 0.11$ drive alone

+

project drive alone

demand

$\frac{\text{Project retail GSF}}{350\ \text{GSF/employee}} \times 0.15$ drive alone

= ______________________ equals

PROJECT LONG TERM PARKING DEMAND

1B. *Project short term*

$\frac{\text{Project office GSF}}{20{,}000} + \frac{\text{Project retail GSF}}{1{,}000}$ *PROJECT SHORT TERM PARKING DEMAND*

(1A) + (1B) = TOTAL PROJECT PARKING DEMAND

*** Derived from September 1983 transportation guidelines, and May 4, 1989 memo, Dean L. Macris to City Planning Commission

2. NET ADDITIONAL PARKING DEMAND

[Total Project Parking Demand] sum of quotients from 1A and 1B above

- minus

[Parking Demand of Existing Uses] apply equations 1A and 1B to existing office and retail uses on the site

= ______________________ equals

NET ADDITIONAL PARKING DEMAND

Note: These calculations as applied to the project should be readily available, either in a footnote or an appendix.

APPENDIX 5.3

STANDARD LANGUAGE TO BE USED FOR THE PARKING SECTION OF TRANSPORTATION IMPACTS CHAPTER OF OFFICE AND MIXED USE COMMERCIAL PROJECTS IN C-3, SOMA AND MISSION BAY

Parking

Parking demand was projected for the proposed ____ Street project on the basis of the estimated vehicular traffic generated by the project. The project would create long term parking demand for about _(see equation 1A)_ spaces (including _(see equation 1A)_ carpool/vanpool spaces), and short term parking demand for _(see equation 1B)_ equivalent daily spaces, for a total parking demand of _(sum of 1A plus 1B)_ daily spaces. Discounting for parking demand generated by existing uses on the site, the net additional parking demand generated by the proposed project would be about _(see equation 2)_ spaces. The proposed project would provide about _____ gross square feet of parking area which the Department of City Planning estimates could accommodate about _____ vehicles with tandem valet operations.[FN1]

Existing parking facilities on the site currently include a total of ____ parking spaces.[FN2] A total of _____ existing parking spaces are private, and reserved for the exclusive use of employees currently working in existing uses on the site. Of the _____ existing parking spaces made available to the general public, _______ leases are currently valid and % of the public parking is, therefore, considered long term. ____% of the public parking (____ spaces) are available for short term use.

The proposed project would eliminate __ existing parking spaces available to the general public,[FN2] resulting in a total unmet demand of about ______ equivalent daily spaces (total project demand + displaced public parking - proposed parking capacity = ______ spaces total unmet demand). Occupancy in off-street public parking lots and garages within a 1/4 mile radius of the project's site may be expected to increase from the existing __% to __% as a result of the unmet parking demand generated by the project.

[NOTE: FOR PROJECTS IN C-3 DISTRICTS USE THE FOLLOWING PARAGRAPH. SEE BELOW FOR LANGUAGE FOR PROJECTS IN SOMA AND MISSION BAY.]

The proposed project is in the C-3 District, in which parking is not required for commercial uses. The City Planning Code allows accessory parking up to seven percent of the gross floor area of the project. The _____ gross square feet of parking proposed by the project sponsor [would be within] [would exceed] this seven percent allowance (__ total project GSF x 0.07 = __ GSF allowed for accessory parking).* The proposed project would allocate at least ** spaces for public short term parking, and at least ** spaces for carpools and vanpools. Parking provided in the proposed project for public use would be subject to a rate structure (City Planning Code Section 155(g)) which encourages short term use and discourages all day parking.

[NOTE: FOR PROJECTS IN SOMA AND MISSION BAY USE THE FOLLOWING PARAGRAPH AS A SUBSTITUTE FOR THE PARAGRAPH ABOVE.]

The proposed project is in the ___ District, in which parking is required for commercial uses. The City Planning Code requires accessory parking in the amount of _ spaces per _ floor area of *(type of use)* for the project, and allows up to 150% of this requirement as accessory parking. The project would be required to provide at least ____ parking spaces; ____ parking spaces are proposed by the project sponsor. The proposed project would allocate at least ____** spaces for public short term parking, and at least ______** spaces for carpools and vanpools. Parking provided in the proposed project for public use would be subject to a rate structure (City Planning Code Section 155(g)) which encourages short term use and discourages all day parking.

FN1 Using the Department's standard of about 215 gross square feet per vehicle for tandem valet parking in downtown San Francisco, per May 4, 1989 memorandum, Dean L. Macris to City Planning Commission.

FN2 This reflects the actual vehicular capacity of the existing garage(s) and/or lot(s) [indicate which] at any point in time, as currently operated [cite whether self-park, tandem, or both], and not the total number of vehicles or individuals who may use the facility. For long term parking, it is recognized that leasing operations often "oversubscribe" parking facilities, selling more leases than the number of vehicles the facility can accommodate at one time, to take care of non-daily users who still wish a long term lease, and those who are in-and-out during the course of the day. As a result, a greater number of parking leases or users may be displaced than the actual vehicular capacity of the facility.

* If the amount of GSF is above the seven percent accessory allowance, an explaination of how the excess is to be used and applied must be included in this paragraph. If Conditional Use approval is being sought for the additional amount, so state. If replacement short term parking is requested, this language should be modified to note that such replacement parking may be exempt from FAR calculations, and that the Project Sponsor is requesting such an exemption.

** Using the ratios cited in the May 4, 1989 memo for minimum parking allocations to short term and rideshare users, plus replacement parking if applicable.

APPENDIX 6

TYPICAL TRANSPORTATION MITIGATION MEASURES FOR THE DOWNTOWN AREA

In the downtown area, a number of transportation related items are required by law which would serve to mitigate impacts, and are summarized here for informational purposes. They should also be referred to in the Mitigation Section of the EIR, not as mitigation measures specific to the project but rather, as generic mitigation measures applicable in the downtown area.

These measures include: contribution of funds for increased transit service per the Transit Impact Development Fee, Board of Supervisors Ordinance #224-81; when auto parking is provided, provision of off-street bicycle storage pursuant to Section 155 of the City Planning Code; provision of transportation brokerage services to coordinate a transportation management program and participation in a network of transportation brokers pursuant to Section 163 of the City Planning Code; priority use of off-street parking in the project for the physically handicapped, travellers in carpools and vanpools, and short-term trips by business visitors and clients, pursuant to Section 155 of the City Planning Code; and provision of building directories and signs for service elevators in loading areas, pursuant to Section 155 of the City Planning Code. Additional generic measures apply which are not related to mitigation of transportation impacts.

Additional measures which are not required by legislation but which would also serve to mitigate transportation impacts and are generally included in transportation analyses as a policy matter include the following.

Measures that could be implemented by the project sponsor as part of the project

- The placement of paving, landscaping or structures in the sidewalk area (subject to City approval) would be done in such a way as to mininmize interference with pedestrian traffic.

- Secure bicycle facilities would be provided for project commuters and short-term visitors which would, at a minimum, provide safe shelter for the number of spaces required in the project.

- While subsurface sidewalk vaults are discouraged, the project sponsor would design subsurface sidewalk vaults to allow for possible future widening of adjacent streets. Vault design shall be of sufficient strength to carry maximum vehicular live and dynamic loads. Design of the vault area to accommodate street trees would also be made, subject to Department of Public Works approval. In addition, should vaults exist or be installed as part of the project, the project sponsor would accommodate and pay for the installation of all subsurface footings, supports and foundations as may be required for future public improvements such as street lights, trolley wire poles, signs, benches, transit shelters, etc. within project vault areas. Placement of such improvements is entirely within the discretion of the City. Should the City at any future time determine its need for any subsidewalk space occupied by the project, for any reason, the project sponsor agrees to waive all rights of appeal of revocation of permits to occupy such space.

- During the construction period, the project sponsor would cause to limit construction truck movement to the hours between 9:00 A.M. and 3:30 P.M., and to prohibit staging or unloading of equipment and materials during the periods of 7:30 A.M. to 9:00 A.M. and 3:30 P.M. to 6:00 P.M., to minimize peak period traffic conflicts and to accommodate queueing of Muni buses prior to the peak hours of service. The project sponsor and construction contractor would meet with the Traffic Engineering Division of the Department of Parking and Traffic, the Fire Department, Muni, and the Department of City Planning to determine feasible traffic management and mitigation measures to reduce traffic congestion during construction of this project and other nearby projects. To minimize cumulative traffic impacts due to lane closures during construction, the project sponsor would coordinate with construction contractors for any concurrent nearby projects that are planned for construction or which later become known.

- The project sponsor would, in cooperation with the Municipal Railway, install eyebolts or make provision for the direct attachment of eyebolts for Muni trolley wires on the proposed building wherever necessary or agree to waive all rights to refuse the attachment of eyebolts to the proposed building if such attachment is done at City expense.

- The parking driveway would include warning devices (lighted signs and noise-emitting devices) to alert pedestrians to vehicles exiting the structure.

Measures that could be implemented by public agencies

- Coordinate work schedules of Pacific Gas and Electric Company and other utilities requiring trenching, so that street disruption would take place during weekends and off-peak hours. This should be done through the San Francisco Committee for Utility Liaison on Construction and Other Projects (CULCOP). In-street utilities should be installed at the same time as the street is opened for construction of the project to minimize street disruption.

- The City could act upon or endorse the implementation of transportation mitigations described in the Mission Bay EIR Vol. II, Section VI.E, Mitigation, pp. VI.E.214- VI.E.217 for the year 2000 and VI.E.224-VI.E.231 for the year 2020, and in the South of Market EIR, pp. 189-194. The measures for the year 2000 include: constructing and maintaining rail rapid transit lines from downtown San Francisco to suburban corridors and major non-downtown centers in San Francisco; incresed funding for Vehicle-Acquisition Plans for San Francisco and regional transit agencies to expand existing non-rail transit service; providing exclusive transit lanes on City streets and on freeways; reducing incentives to drive by discouraging long-term parking; encouraging carpools, vanpools and bicycle use; improving pedestrian circulation within downtown San Francisco; and providing transportation brokerage services. The Mission Bay EIR describes various types of measures to illustrate the magnitude of improvements needed to mitigate the impacts of regional growth in 2020.

Some of the implementing actions would require approval by decision-makers outside the City and County of San Francisco; many of the measures would require action by City agencies other than the City Planning Commission, such as the San Francisco Public Utilities Commission and/or Board of Supervisors. All except such things as providing transportation brokers would require funding from or approval by MTC. These measures are system-wide measures that must be implemented by public agencies. Other than project-specific measures such as the relevant transportation mitigation measures described above as part of the project or such measures as the Transit Impact Development Fee assessment by San Francisco Ordinance 224-81 which would contribute directly to implementation of these system-wide measures, it is not appropriate to impose mitigation at system-wide levels on individual projects.

APPENDIX 7

Freight Delivery and Service Vehicle Demand

Peak Hour* Generation

$$\text{Number of Spaces per 1,000 GSF} = \frac{\dfrac{(R) \times 1.25}{9}}{2.4}$$

Average Hour Generation

$$\text{Number of Spaces per 1,000 GSF} = (R) \div 9 \div 2.4$$

$$\text{Daily Truck Trip Generation Per Use} = \frac{GSF}{1,000} \times (R)$$

Where:

R = Daily truck trip generation per 1,000 GSF of use from Table 7.1

1.25 = Peak Hour deliveries at 25% higher rate than other hours

9 = Number of hours deliveries are made (8:00A.M.-5:00P.M.)

2.4 = Assuming average truck delivery/pickup of 25 minutes, 2.4 trucks could be accommodated per hour

*NOTE Peak Hour Truck Trip Generation generally occurs between 10:00A.M. and 1:00P.M., and is unrelated to P.M. Peak Hour used in other transportation analyses.

Table 7.1 Daily Truck Trip Generation Rate per 1,000 Square Feet of Floor Area, by Land Use

Office	.21
Bank	.30
Retail (Composite)	
Wholesale	.22
Apparel	.80
Department Store	.45
Furniture	.24
Restaurant/Bar	3.60
Drug Store	3.70
Specialty Shops	.18
Services	
Hotel	.09
Institution	.10
Business	1.80
Parking	.03
Administration	.40
Warehousing	.46
Manufacturing	.51
Light Industry	.65
Residential	.03

Source: Center City Pedestrian Circulation and Goods Movement Study (Wilbur Smith & Assoc. for San Francisco Department of City Planning). September, 1980

TABLE 7.2 Percent Daily Truck Activity by Vehicle Type

Cars and Pickups	25%
Vans	42%
Small Delivery Trucks[1] 2 axles	9%
Large Delivery Trucks[2] 2 axles	19%
Large Delivery Trucks[3] 3 axles	4%
Tractor - Trailer 4 axles	1%

[1] Characterized as a small courier, U.S. Mail truck or step van

[2] Characterized as a mid-size Hertz rental truck, beverage truck or small furniture truck

[3] Characterized as a garbage truck

Source: DKS Associates, 1990

City and County of San Francisco
Department of City Planning

450 McAllister Street
San Francisco, CA 94102

TRANSPORTATION STUDY SCOPE OF WORK
ACKNOWLEDGEMENT AND APPROVAL

Transmittal To: ______________________________ **Date:** ____________

____

____

____

The proposed scope of work for the ______________________________ project, Case No. ______________, dated ______________________ is hereby

- ☐ Approved as submitted
- ☐ Approved as revised and resubmitted
- ☐ Approved subject to comments below
- ☐ Not approved, pending modifications specified below and resubmitted

Signed: ______________________ ______________________

Transportation Section *Office of Environmental Review*

Comments: ______________________________

____

____

____

____

____

Note: A copy of this approval and the final scope of work is to be appended to the transportation study. The Department advises consultants and project sponsors that review of the draft transportation report may identify issues or concerns of other City agencies not addressed in the scope of work hereby approved, and that the scope of work may need to be modified to accommodate such additional issues.

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APPENDIX 9

YEAR 2000 P.M. PEAK HOUR AND P.M. PEAK PERIOD MODAL SHARES FOR OUTBOUND TRAVEL* FROM DOWNTOWN AND VICINITY

	P.M. PEAK HOUR	P.M. PEAK PERIOD
Drive Alone	20%	21%
Rideshare	10%	11%
Muni	24%	23%
BART	24%	23%
AC Transit	7%	7%
SamTrans	1%	1%
CalTrain	2%	2%
Golden Gate Bus	4%	4%
Golden Gate Ferry	1%	1%
Other	7%	7%

* represents both work and nonwork travel, outbound only.

Source: Mission Bay FEIR, Table VI.E.7,
300 Street Howard FEIR (89.589E), background transportation documents

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APPENDIX VI

Downtown Transit Impact Development Fee Ordinance

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AMENDMENT OF THE WHOLE
AS AMENDED IN BD. 5/4/84

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FILE NO. 170-84-1

ORDINANCE NO. 224-84

(TIDF)

AMENDING CHAPTER 38 OF THE SAN FRANCISCO ADMINISTRATIVE CODE BY AMENDING SECTIONS 38.1, 38.2, 38.5 AND 38.8 THEREOF AND BY ADDING SECTION 38.8.5 THERETO RELATING TO THE PRINCIPLES TO BE USED IN CALCULATING THE AMOUNT OF THE TRANSIT IMPACT DEVELOPMENT FEE AND PROVIDING FOR ADJUSTMENT TO THE TRANSIT IMPACT DEVELOPMENT FEE IN CASES OF CONVERSION FROM OTHER USES TO OFFICE USE TO INCORPORATE THE TRIP GENERATION RATE OF PRIOR USE SO AS TO ACCURATELY MEASURE THE INCREMENTAL IMPACT OF THE CONVERSION TO OFFICE USE ON THE SAN FRANCISCO MUNICIPAL RAILWAY.

NOTE: Additions or substitutions are underlined;
deletions are indicated by ((double parentheses)).

Be it ordained by the people of the City and County of San Francisco:

Section 1. Sections 38.1, 38.2 and 38.5 of Chapter 38, the San Francisco Administrative Code, are hereby amended to read as follows:

Section 38.1. Definitions.

For the purposes of this chapter, the following definitions shall apply:

(a) BOARD. The Board of Supervisors of the City and County of San Francisco.

(b) CERTIFICATE OF FINAL COMPLETION AND OCCUPANCY shall mean a certificate of final completion and occupancy issued by the Superintendent, Bureau of Building Inspection, pursuant to the Building Code.

(c) CITY. The City and County of San Francisco.

(d) DOWNTOWN AREA. That portion of the City and County bounded by Van Ness Avenue as far north as Broadway, from Van Ness Avenue and Broadway easterly on Broadway to Sansome Street; then northerly on Sansome Street to the Embarcadero; then southeasterly on the Embarcadero to Berry Street; then southwesterly on Berry Street to De Haro Street; then southerly on De Haro Street to Alameda Street; then westerly on Alameda Street to Bryant Street; then northerly on Bryant Street to Thirteenth Street; then westerly on Thirteenth Street to South Van Ness Avenue; then northerly to Van Ness Avenue. The downtown area includes all property with an address on any of or within the area surrounded by the above enumerated boundary streets.

(e) GROSS SQUARE FOOT OF OFFICE USE. A square foot of floor space within a structure, whether or not within a room, to be occupied by, or primarily serving, office use.

(f) NEW DEVELOPMENT. Any new construction, addition, extension, conversion, or enlargement of an existing structure which includes any gross square feet of office use.

(g) OFFICE USE. Any structure or portion thereof intended for occupancy by business entities which will primarily provide clerical, professional or business services of the business entity, or which will primarily provide clerical, professional or business services to other business entities or to the public, at that location.

(h) PEAK PERIOD. The total number of minutes in an average working day, determined in accordance with Section 38.5(a), during which ((the passenger demand on)) the Municipal Railway ((system would require it to deploy)) deploys all its operable equipment so that the system experiences no excess vehicular capacity.

(i) PUBLIC TRANSIT SERVICE. Services of the Municipal Railway of the City and County of San Francisco.

/ / /

Section 38.2. Findings.

All office uses in the downtown area are benefited by virtue of the availability of the Municipal Railway as a means of transit for employees and customers.

The demand for public transit service from downtown area office uses imposes a unique burden on the Municipal Railway, qualitatively different than the burden imposed by other uses of property in San Francisco. The need for that level of service provided by the Municipal Railway during peak periods can be attributed in substantial part to office uses of property in the downtown area.

New developments will bring increased need for public transit service in the downtown area during peak periods. The Municipal Railway will be burdened with the demands of transporting a larger number of passengers. Future increases in demand for public transit service are therefore attributable directly to new development in the downtown area increasing the number of persons using the Municipal Railway during peak periods.

This increased demand must be met not only by the acquisition of new rolling stock and the addition of new services, but also by the employment of additional personnel and fuel to operate the added facilities, and the maintenance, repair and replacement of the additional facilities as they wear out or become obsolete.

That level of additional cost incurred by the City in expanding and operating, maintaining, repairing and replacing its public transit facilities to accommodate the additional peak-period person-trips generated by office use in new developments can be translated into a cost per gross square foot of office use in the new developments. The cost of expanding

current services and adding new services is directly proportional to the amount of peak-period Municipal Railway travel generated by new development. Development of office uses causes more additional Municipal Railway peak-period person-trips, per square foot, than the development of any other use of property in the downtown area. It is desirable to impose the increased burden of serving such use, through a fee approximating the cost per square foot, directly upon the developer of new development generating the need.

Even though other uses such as retail use also generate Municipal Railway peak-period person trips (and even if a particular alternate use were to generate more such trips than do office uses), the Board refrains from imposing the Transit Impact Development Fee on such uses at this time, and in that regard finds: (1) The vast majority of new commercial space in the downtown area will be devoted to office uses, and the primary cause for new peak-period Municipal Railway passengers will be the development of new office uses; and (2) a significant proportion of the new retail and service uses which will hereafter be developed in the downtown area will be constructed in connection with new office developments and, for that reason, limitation of the Fee to office uses both ameliorates the economic impact of the Fee on developers of office space and encourages the development of projects with mixed uses consisting of office, retail and service uses.

Sec. 38.5. Transit Impact Development Fee Schedule.

This Transit Impact Development Fee Schedule is set at an actuarially sound level to insure that the proceeds from the Transit Impact Development Fee from each new development is sufficient, including such earnings as may be derived from investment of all proceeds and amortization thereof, to pay for all capital and operating costs incurred in providing and operating additional required peak-period public transit service capacity, over the life of such new development; without, however, exceeding five dollars ($5.00) per square foot.

The following principles have been and, in the future, shall be observed in calculating the amount of the Fee:

(a) The times during the day which constitute the peak period shall be determined functionally as that period of time during which a decision to add additional scheduled vehicle runs would require Muni to purchase or lease additional vehicles because the existing available fleet is fully committed in the sense that vehicles are actually in revenue service, being held for deployment later in the peak period, in reserve, or scheduled for repair or preventive maintenance.

(b) State, federal and private operating and capital subsidies for the cost of providing additional peak period service shall be assumed only when and to the extent that receipt of such subsidies is reasonably probable.

(c) The calculation of future costs of providing service for additional passengers during the peak periods should assume no increase in the level of crowding for the system as a whole or material decreases in the frequency of service.

(d) The cost of electricity shall be calculated based on the price which the City could receive for such power were it sold to PG&E assigned customers rather than the cost at which it is furnished to the Municipal Railway by the Hetch Hetchy Water and Power Department.

(e) Costs and revenue attributable to trips taken outside the peak periods by office workers and visitors shall not be

included.

(f) In calculating the revenue from additional peak period trips, a weighted average fare (reflecting the frequency of trips paid for by cash fares as opposed to fast passes) shall be estimated. In making this calculation, the average fare for a fast pass trip shall be determined by dividing the cost of a fast pass by an estimate of the total number of trips per month (whether or not taken in the peak period) which will be taken by a fast pass purchaser. In projecting future revenues, peak period revenue shall be assumed to increase at the same rate as peak period operating costs.

(g) Where feasible, actual information for the fiscal year for which the fee is being calculated should be used. Where estimates must be made, those estimates should be based on such information as the General Manager of the Public Utilities Commission or his delegate considers reasonable for the purpose. Possible changes in the operation or productivity of the Municipal Railway shall be taken into account only if such changes are the announced policy of the Municipal Railway or the Public Utilities Commission and the impact of such change on peak period costs or revenues can be estimated with reasonable certainty.

The Transit Impact Fee Schedule shall be as follows:

FOR EACH GROSS SQUARE FOOT OF OFFICE USE
IN NEW DEVELOPMENT IN THE DOWNTOWN AREA. $5.00*

*Formula fee rate calculated ((at $9.18)) to be in excess of $5.00; limited to $5.00.

/ / /

Section 2. Section 38.8 of Chapter 38 of the San Francisco Administrative Code is hereby amended to read as follows:

Section 38.8. Setting of Fee.

Each developer, prior to obtaining a building permit for any new development in the downtown area after the effective date of this ordinance, shall file with the General Manager of the Public Utilities Commission, on such form as he may develop, a report indicating the number of gross square feet of the new development intended for office use. Each developer of a new development for which a building permit was issued prior to the effective date of this ordinance and for which a final certificate of occupancy had not been issued prior to the effective date of this ordinance shall file the same report prior to obtaining a final certificate of occupancy. The General Manager shall determine the number of gross square feet of office use to which the Transit Impact Development Fee Schedule applies, ((crediting the number of gross square feet of office use being eliminated as part of the project and)) disregarding the number of gross square feet of office use being retained, determine the useful life category if the Fee Schedule includes useful life categories, apply the fee schedule, and determine the fee which reflects the additional cost of peak-period public transit service generated by the office use in the new development. The applicant shall be notified of the General Manager's determination in writing. The General Manager shall mail a copy of his determination to the applicant. The applicant may appeal the determination of the number of gross square feet of office use subject to the fee, the adjustment factor described in Section 38.8.5(b), or the useful-life category if the fee schedule includes useful life categories, to the Public Utilities

Commission in order to reduce the amount of the fee obligation. If the applicant notifies the General Manager of his acceptance of the determination, or does not appeal to the Public Utilities Commission within 15 days of the date of personal service or mailing of notice of the General Manager's determination, the General Manager's determination shall be final, and a notice of such determination shall be provided the Central Permit Bureau. The Central Permit Bureau may not issue a building permit for any new development in the downtown area until it has received notice from the General Manager of the Public Utilities Commission or the Public Utilities Commission of the final determination of the amount of the Transit Impact Development Fee to be paid.

Section 3. Chapter 38 of the San Francisco Administrative Code is hereby amended by adding Section 38.8.5 thereto, reading as follows:

Section 38.8.5. Credits for Prior Use.

In determining the number of gross square feet of office use to which the Transit Impact Development Fee Schedule applies, the General Manager shall provide for the following credits:

a. For prior office uses, there shall be a credit for the number of gross square feet of office use being eliminated as part of the project.

b. For prior uses other than office use, there shall be a credit for the number of gross square feet of non-office use being eliminated multiplied by an adjustment factor to reflect the difference between office building peak period municipal railway trip generation rates and peak period municipal railway trip generation rates for other uses. The adjustment factor shall be determined by the General Manager as follows:

(1) The adjustment factor shall be a fraction, the

numerator of whi[illegible] shall be the peak period municipal railway trip generation rate which the General Manager shall determine, in consultation with the Department of City Planning applies to the class of prior use being eliminated by the project.

(2) The denominator of the fraction shall be the peak period municipal railway trip generation rate for office use used in the most recent calculation of the Transit Impact Development Fee Schedule approved by the Board of Supervisors.

(3) Notwithstanding the foregoing, the adjustment factor shall not exceed 1.

Section 4. The Board finds and declares that the principles to be employed in calculating the amount of the fee as set forth in Section 1 above are wholly consistent with the Board's intention in enacting the Transit Impact Development Fee Ordinance, with the cost analysis presented to the Board by Bruce Bernhard at the time the ordinance was enacted (which, after correction of certain errors, estimated the loss per square foot to be $6.57, which estimate the Board accepts as reasonable), with the Transit Impact Development Fee Cost Studies for fiscal years 1980-81 and 1981-82 approved by the Board by Resolution 880-83, and with the revised Transit Impact Development Fee Cost Study prepared by Touche Ross & Co. dated February 22, 1984 making certain revisions to the estimation of the FY 1980-81 net present value of the loss which would be incurred in providing additional peak-period transit service (resulting in a net reduction of said loss from $8.60 to $8.36 per square foot). The Board hereby approves the assumptions, methodology and conclusions stated in said revised Transit Impact Development Fee Cost Study. The Board accordingly finds that as of the date the Ordinance was enacted, and at all times thereafter, the net

present value of the loss which would be incurred in providing additional peak period transit service was in excess of $5.00 per square foot.

Section 5. The Board of Supervisors intends that the portion of the amendment to Chapter 38 adding Section 38.8.5 be given full retroactive effect so that the credits allowed by Section 38.8.5 shall be afforded to all developers who have paid the fee or will hereafter be required to do so.

Section 6. The amendments to Chapter 38 set forth in Sections 2 and 3 of this ordinance shall not be effective unless and until, prior to June 25, 1984, the City Attorney has advised the Clerk of the Board that either (1) the Superior Court for the County of San Francisco has entered an order approving a partial settlement of Russ Building Partnership, et al. v. City and County of San Francisco, No. 780-795, providing that no claims for costs, attorney's fees or expenses may be sought by the class action plaintiff therein on account of the adoption of Section 2 and 3 of this ordinance; or, alternatively, (2) that the Superior Court has determined that no such court order approving such partial settlement is required by law.

APPROVED AS TO FORM:

Deputy City Attorney

0125D

Passed for Second Reading
Board of Supervisors, San Francisco

MAY 7 1984

Ayes: Supervisors Britt, Hongisto, Kennedy, Kopp, Maher, Molinari, ~~Nelder,~~ Renne, Silver, ~~Walker,~~ Ward.

Noes: Supervisors NELDER

Absent: Supervisors WALKER

John L. Taylor Clerk

199841
File No.

5/15/84
Approved

Read Second Time and Finally Passed
Board of Supervisors, San Francisco

MAY 14 1984

Ayes: Supervisors Britt, Hongisto, Kennedy, Kopp, ~~Maher,~~ Molinari, ~~Nelder, Renne,~~ Silver, ~~Walker, Ward.~~

Noes: Supervisors NELDER

Absent: Supervisors MAHER RENNE
WALKER WARD

I hereby certify that the foregoing ordinance was finally passed by the Board of Supervisors of the City and County of San Francisco.

John L. Taylor Clerk

Mayor

APPENDIX VII

San Francisco Trip Reduction Efforts: Relationship to Regional Transportation Control Measures

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San Francisco Trip Reduction Efforts: Relationship to Regional Transportation Control Measures

TCM and Discussion	Local Implementation
1. Expand employer assistance programs	The San Francisco transportation management and brokerage program is focusing on the following 3 major activities in FY 95/96: 1) compliance monitoring of buildings required to have a TDM program, 2) development of a rideshare parking brokerage program in the downtown area, and 3) continued implementation of the City and County Employee Commute Assistance Program (CACEP).
2. Adopt employer-based trip reduction ordinance. Required for compliance with Rule 1 of Regulation 13, issued by the Air Quality Management District (BAAQMD) in December 1992.	San Francisco has adopted ordinances for transportation management and transportation brokerage programs which apply to the downtown area and Mission Bay. Voluntary programs are in place for certain institutional uses in other areas of the city. Existing regulations include highly effective parking restrictions. A total of $520,667 in local sales tax funds is budgeted for TMA brokerage and trip reduction programs for FY 95/96. For further details on compliance with Rule 1, see Chapter 6.
4. Expand new rail starts program. Tied to implementation of the current rail agreement (MTC's Resolution 1876) which calls for a $3.5 billion program comprising five rail extension projects.	No San Francisco project is included in this list; however, the City has programmed and partially funded several rail extension projects which could become a part of this TCM. These include construction of the F-Line Streetcar in the median of the realigned Embarcadero Roadway, extension of light rail service from the Muni Metro Turnback to 16th Street, and extension of trolley bus lines to Mission Bay and Potrero Hill areas. These and other transit projects are included in the Capital Improvement Program. (See Chapter 8).
5. Improve access to rail and ferries. Expand local transit service to regional facilities.	Installation of an Automatic Train Control System will permit more frequent light rail service to the Ferry Building. The MUNI Metro extension to Mission Bay will provide direct light rail service to the Caltrain depot.

San Francisco Transportation Control Measures (contd.)

6. **Improve inter-city rail service.** Focus of this measure is the establishment of Sacramento-Oakland-San Jose rail service.	While no long-distance service expansion is planned for San Francisco, the City is donating right-of-way for the Peninsula Commute Service and participating in funding for the Joint Powers Board.
7. **Improve ferry service.** Purpose is expansion of ferry service as funding allows. MTC has prepare a long term ferry service plan and will allocate funds under its control consistent with the final recommendations of this plan.	The Port Authority of San Francisco has received funding for expansion of ferry docking facilities at Pier 1/2. Additional ferry terminal expansion projects were included in the 1991 CMP. (See Chapter 8).
8. **Construct carpool and express bus lanes on freeways.** The region, in cooperation with Caltrans, has adopted a 2005 HOV master plan which includes 480 lane-miles of HOV lanes compared to the 80 lane-miles at present.	Freeway HOV lanes currently exist on the approaches to the Bay Bridge and Golden Gate Bridge. The first phase of the 2005 HOV Master Plan calls for the creation of an HOV lane on I-280 east of US 101.
9. **Improve bicycle access and facilities.** This TCM proposes an expansion of the carrying capacity of buses, ferries and rail transit; and it encourages employers and developers to proved bicycle access and facilities.	Department of Parking and Traffic has hired the City's first Bicycle Coordinator/Planner. The department has also recently completed a draft Bicycle Plan which will be used to guide future bicycle improvements and programs.
10. **Youth transportation.** Support programs to reduce youth transit fares, encourage school carpools and purchase clean fuel school buses.	MUNI offers youth fares and youth monthly passes, and conducts public education campaigns in the schools.
11. **Install freeway traffic operations system.** Purpose is to improve flows on freeways by increasing average travel speeds and eliminating major tie ups more quickly.	Implementation of this TCM is being coordinated by Caltrans. The Authority has programmed funds for TOS projects on US 101 and I-280. (See Chapter 8)

San Francisco Transportation Control Measures (contd.)

12. Improve arterial traffic management. MTC will support existing and expanded signal timing programs and encourage transit signal preemption.	Department of Parking and Traffic has undertaken a long-term project to replace aging signal controllers and install signals with transit preemption capabilities on transit preferential streets. The Authority has prioritized STP/CMAQ funds for signal timing and signal preemption projects by MUNI and the Department of Parking and Traffic. (See Chapter 8).
13. Transit Use Incentives. Measure encourages coordination between transit operators on routes, schedules, fares, and payment methods (e.g. passes). Also, suggests fare reductions off-peak.	Implementation of this TCM requires additional funds from regional, state, or federal sources.
14. Improve Rideshare/Vanpool Services and Incentives.	The City's TMA activities include both required and voluntary programs for certain employers in the downtown core. These programs include rideshare and vanpool incentives.
15. Local Clean Air Plans, Policies and Programs. This measures encourages localities to incorporate air quality beneficial policies into local planning and development activities that will reduce the number and length of single occupant vehicle trips.	The City's land use and parking regulations, along with the Transit Development Impact Fee, constitute development regulations for the mitigation of new travel demand.
16. Intermittent Control Measure/Public Education. BAAQMD's "Spare the Air" program will be used to encourage the public to reduce motor vehicle use on days of expected ozone exceedances.	Implementation of this TCM is occurring through the BAAQMD and the City's TMA.
17. Conduct demonstration projects. Focus is to promote demonstration projects to develop new strategies to reduce motor vehicle emissions.	San Francisco is responding to this measure within the scope discussed earlier in this Chapter for transportation management initiatives.

San Francisco Transportation Control Measures (contd.)

18. Implement Revenue Measures. Develop revenue sources (e.g. regional gas tax, continuation of CMAQ) needed to implementation mobility improvements and user incentives.	The Authority is working with MTC through the Bay Area Partnership to identify new revenues sources. The Authority Board recently passed a resolution supporting SB 877 which would allow implementation of a regional gas tax with the proceeds used to fund transportation projects and activities.
19. Implement market-based pricing measures. A Phase 3 TCM. Full implementation cannot occur until authorizing legislation is passed.	San Francisco currently taxes all paid parking 25%, and the city planning code mandates a rate structure for garages which discourages long-term parking downtown.

APPENDIX VIII

Glossary of CMP Related Terms

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GLOSSARY OF CMP RELATED TERMS

Association of Bay Area Governments - (ABAG)	The regional agency that is responsible for regional planning other than for transportation. ABAG publishes forecasts of projected growth for the region.
Air Quality Attainment Plan	The plan for attainment of state air quality standards, as required by the California Clean Air Act of 1988. It is adopted by air quality districts and subject to approval by the State Air Resources Board.
Average Daily Traffic (ADT)	The average number of vehicles passing a specified point during a 24 hour period.
Bay Area Air Quality Management District - (BAAQMD)	The regional agency which adopts and enforces regulations to achieve and maintain state and federal air quality standards in the nine county Bay Area.
California State Department of Transportation (Caltrans)	Responsible, as the Department owner/operator of the state highway system for its safe proposed operation and maintenance. Proposes projects for Intercity Rail, Interregional Roads, and sound walls in the PSTIP. Also responsible for the HSOPP, Toll Bridge, and Aeronautics programs. The TSM and State/Local Partnership Programs are administered by Caltrans. Caltrans is the implementing agency for most state highway projects, regardless of program, and for the Intercity Rail Program.

Capital Improvement Program (CIP)	As used in this document: A seven year program of projects to maintain or improve the traffic level of service and transit performance standards developed by the CMP.
Capital Priorites	A process used by MTC to evaluate and prioritize transit projects in the region. All sources of transit funding, including UMTA grants, state programs, and other sources are considered. This process involves all of the transit operators in the region, including bus, rail, and ferries.
Congestion Management Agency (CMA)	The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.
Congestion Management Program (CMP)	A Legislatively required county-wide program which addresses congestion problems.
Flexible Congestion Relief (FCR)	One of the state funding programs for local or regional transportation projects that will reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible for FCR funds.
Highway System Operation Protection Plan - (HSOPP)	A program created by state and legislation that includes projects related to state highway safety and rehabilitation, seismic safety, and traffic operational improvements. HSOPP is a four year program of projects adopted separately from the STIP.

Level of Service - (LOS)	A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time. Expressed in range of A through F, with F being the worst.
Model	A mathematical description of a real-life situation that uses data on past and present conditions to make a projection about the future.
Model - Land Use	A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.
Model - Traffic	A mathematical equation or graphic technique used to simulate and predicts traffic movements, particularly those in urban areas or on a freeway.
Peak - (Peak Period, Rush Hours)	1. The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak. 2. The period when demand for transportation service is the heaviest.

Principal Arterial	A functional classification system which defines a street or roadway in terms of the nature and composition of travel. Principal arterials derive their importance from service to rural oriented traffic, but equally or even more importantly, from service for major movements within the urbanized area. The principal arterial system carries the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. The US Department of Transportation provides the guidance that 40-65% of the VMT should be accounted for on the principal arterial system.
Proposed State Transportation Improvement Program - (PSTIP)	This seven year program is based on the adopted STIP and the most recent Project Delivery Report. It is developed by Caltrans for CTC approval and includes projects developed through the IRRS, Intercity Rail, Sound Wall, Toll Bridge, and Aeronautics programs.
Proposition 116	Passed by the voters in June of 1990, this initiative sponsored by the Planning and Conservation League provides $1.9B in rail bonds, primarily to projects specified in the legislation.

Regional Transportation Improvement Program - (RTIP)	A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency, as a request for state funding through the FCR and Urban and Commuter Rail Programs. The individual projects are first proposed by local jurisdictions (CMAs in urbanized counties), then evaluated and prioritized by the MTC for submission to the CTC. The RTIP has a seven year planning horizon, and is updated every two years.
Regional Transportation Plan - (RTP)	A comprehensive 20 year plan for the region, updated every two years by the regional transportation planning agency. The RTP includes goals, objectives, and policies, and recommends specific transportation improvements.
Regional Transportation Planning Agency - (RTPA)	The agency responsible for the preparation of RTPs and RTIPs and designated by the State Business Transportation and Housing Agency to allocate transit funds. RTPAs can be local transportation commissions, council of governments, metropolitan planning organizations, or statutorily created agencies. MTC is the RTPA for the nine county Bay Area.
Short Range Transit Plan (SRTP)	A five year comprehensive plan required by UMTA for all transit operators receiving federal funds. The plans establish the operator's goals, policies, objectives; analyzes current and past performance, and describes short term operational and capital improvement plans.

State Implemention Plan - (SIP)	State plan required by the Federal Clean Air Act of 1990 to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.
Transportation Control Measure - (TCM)	A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles.
Transportation Demand Management - (TDM)	Demand based techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of peak hours.
Transportation System Management - (TSM)	That part of the urban transportation planning process undertaken to improve the efficiency of the existing transportation system. The intent is to make better use of the existing transportation improvements that generally cost less and can be implemented more quickly than major capital improvements.
U/C Rail - Urban and Commuter Rail	A state funding program financed by the sales of bonds authorized by Proposition 108. Two additional bond measures to fund this program will be placed in front of the voters in 1992 and 1994. All projects must be matched 50% by local funds. Projects are proposed through the CMP process to regional agencies, which then may include them in their RTIPs.

Transportation Level of Service Definitions,

Level of Service	Description	Volume/Capacity V/C Ratio
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.	0 - 0.60
B	Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can be generally described as very good.	0.61 - 0.70
C	Level of Service C describes a condition where the approach to an intersection if often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71 - 0.80
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operations can generally be described as fair.	0.81 - 0.90
E	Capacity occurs at Level of Service E. It represents the most number of vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles.	0.91 - 1.00
F	Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.	1.01+

Source: Highway Research Board, Highway Capacity Manual, 1965 and Environmental Science Associates, Inc.

Urbanized Area	As defined by the Bureau of the Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). The boundary is based primarily on a population density of 1000 people/mile but also includes some less densely settled areas, as well as such areas as industrial parks and railroad yards, if they are within areas of dense urban development. The boundaries of urbanized areas, the specific criteria used to determine urbanized areas, or both may change in subsequent censuses.
Vehicle Miles of Travel - (VMT)	1. On highways, a measurement of the total miles traveled in all vehicles in the area for a specified time period. It is calculated by the number of vehicles multipled by the miles traveled in a given area or on a given highway during the time period. 2. In transit, the number of vehicle miles operated on a given route or line or network during a specified time period.
Vehicle Occupancy	The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.
Vehicle Trip	A one-way movement of a vehicle between two points.

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DATE: October 11, 1995

TO: Interested Parties

RE: **Preliminary Negative Declaration and Initial Study for the 1995 San Francisco Congestion Management Program**

FROM: José Luis Moscovich, Director of Congestion Management José Luis

The San Francisco County Transportation Authority has prepared an Initial Study and Negative Declaration for the 1995 update of the San Francisco Congestion Management Program for the City and County of San Francisco. A copy of these documents are attached for your review and comment.

The documents are being circulated for a 30-day review period. Written comments should be addressed to:

José Luis Moscovich
Director of Congestion Management
San Francisco County Transportation Authority
100 Van Ness Avenue, 25th Floor
San Francisco, CA 94102

and must be received by 5:00 p.m., November 10, 1995.

Approval of the Negative Declaration and adoption of the final 1995 San Francisco Congestion Management Program will take place at a public hearing scheduled for the Authority's regular meeting of November 20, 1995 at 401 Van Ness Avenue, San Francisco.

Attachments

OCT 12 1995

CONFORMED COPY of document recorded on ____
at ________ as No. F868382
This document has not been compared with the original
SAN FRANCISCO COUNTY RECORDER.

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY
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PRELIMINARY NEGATIVE DECLARATION

Date of Publication: October 11, 1995

Lead Agency: San Francisco County Transportation Authority
100 Van Ness Avenue, 25th Floor San Francisco, CA 94102

Contact Person: José Luis Moscovich, Director of Congestion Management
Telephone: (415) 557-6857

Project Title: 1995 San Francisco Congestion Management Program

Project Sponsor: San Francisco County Transportation Authority (Authority)

THIS PROJECT COULD NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.

This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to Prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

Based on the findings of the Initial Study, the subject project will not have a significant effect on the environment for the following reasons:

- The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory (California Code Section 15065 (a)).

- The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term goals (California Code Section 15065 (b)).

- The project does not have possible environmental effects which are individually limited but cumulatively considerable (California Code Section 15065 (c)).

- The environmental effects of the project will not cause substantial adverse effects on human beings, either directly or indirectly (California Code Section 15065 (d)).

- The project involves adoption of a policy document and will not result directly in any environmental change. While the Congestion Management Program (CMP) identifies projects which will further the goals of the CMP, inclusion in the CMP is insufficient to cause any project to be implemented. Environmental analyses of individual projects will occur outside of the CMP process.

Copies of the Draft 1995 San Francisco CMP, the Negative Declaration, and Initial Study are available for review at the Authority's offices at 100 Van Ness Avenue, 25th Floor, and at the Reference Desk of the main San Francisco Library at 200 Larkin Street. Approval of the Negative Declaration and adoption of the final 1995 San Francisco CMP will take place at a public hearing scheduled for the Authority's regular meeting of November 20, 1995 at 401 Van Ness Avenue.

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Initial Study

Project Title: 1995 Congestion Management Program for the City and County of San Francisco

Lead Agency: San Francisco County Transportation Authority
100 Van Ness Avenue, 25th Floor San Francisco, CA 94102

Contact Person: José Luis Moscovich, Director of Congestion Management
Telephone: (415) 557-6857

Project Location: All of the City and County of San Francisco

Project Sponsor: San Francisco County Transportation Authority (Authority)

Project Description: The action which prompts this evaluation is the proposed adoption of a State-mandated program for the integration of transportation, land use, and air quality planning and programs. Section 65089 of the California code requires adoption of a Congestion Management Program (CMP) by urban counties to maintain eligibility for certain State and Federal transportation funding. The Authority, as the designated Congestion Management Agency for San Francisco, has the responsibility for preparing, updating, and adopting the CMP. The legislation requires the biennial report to contain at least the following elements:

1) a designated network of CMP roadway facilities;

2) standards for roadway level of service (LOS), and a traffic monitoring program to determine whether these standards are being met;

3) a multimodal performance element, including measures to evaluate current and future transportation system performance;

4) a trip reduction and travel demand element;

5) a program to analyze the impacts of local land use decisions on the CMP network; and

6) a seven-year multimodal capital improvement program.

A Draft 1995 San Francisco CMP document is currently being circulated for comment. The proposed project is the adoption of the final 1995 San Francisco CMP.

Discussion

The first CMP for San Francisco was prepared and adopted by the Authority in October 1991 and updated in 1993. As was the case for the 1991 and 1993 CMPs, the Authority's approach for the preparation of the 1995 San Francisco CMP update was to compile existing City regulations and practices which are now in force and are sufficient to demonstrate conformance with the letter and intent of the CMP requirements contained in State law, and to supplement those with other required CMP components. The Draft 1995 San Francisco CMP introduces some procedural changes over the 1993 CMP report, including specific guidance on development of Deficiency Plans and on the review of programming decisions, but it does not affect major policy areas. In particular, the level of service standard for CMP roadways, set at "E" in 1991, remains unchanged.

The Draft 1995 San Francisco CMP re-adopts the 1993 project list without any additions because of the absence of new state funding. The proposed project list includes mostly transit, bicycle and pedestrian projects. All roadway projects included in the list involve reconstruction or rehabilitation of existing facilities, and are therefore not expected to increase the vehicular capacity of the City's roadway network or generate significant impacts. Furthermore, no changes are proposed for the City's land use patterns and therefore no effects are anticipated as a result of adopting the program. Given below is a discussion of activities in each of the above six areas, necessary to document conformance with the requirements of the CMP legislation.

1) Designate a network of roadway facilities: The network established contains streets and highways which are already included in the Transportation Element of the City's Master Plan as major thoroughfares. No changes are introduced over the 1993 CMP network.

2) Establish Standards for Roadway Level of Service (LOS) and a traffic monitoring Program: The CMP contains two important elements needed for conformance with State requirements for this program. The first element is to establish the current LOS for roadway segments in the network. The 1991 CMP identified those segments which were operating at levels A through C, and showed the segments operating at more congested LOS D through F. The second required element is the establishment of a standard below which the performance of the roadway network will not be allowed to fall. Although the initial (1991 CMP) monitoring data showed that portions of the network were operating above this level, the standard set in the 1991 CMP is LOS "E". Segments operating at LOS F at the time of adoption of the 1991 CMP are exempted from CMP.

A monitoring program which focuses most resources on the portions of the network that are at LOS D and below, was put in place to determine whether congestion levels are improving or deteriorating. Deterioration of LOS in the CMP roadway network (measured according to procedures described in the CMP) triggers the requirement for deficiency plans, to address the problem. The 1995 monitoring was conducted for all segments that were at a LOS D or E during the 1993 CMP monitoring cycle, as required. No effects on the environment result from the LOS monitoring program.

3) Establish Multimodal Performance Measures To Evaluate Current and Future System Performance: As required by Section 65089(b)(2), the performance element replaces the transit service standards in the 1991 and 1993 CMPs. Consistent with state law, the 1995 San Francisco CMP distinguishes between two tiers of performance measures. Tier 1 include roadway LOS plus three transit service performance measures: routing, frequency, and interoperator service coordination. These are the most traditional measures and the most extensively documented, and they will be used in connection with CMP conformance determinations. Tier 2 includes new multimodal performance measures which will undergo further refinement and testing over the next year before they are applied to the CMP conformance process. No impacts on the environment are expected from the introduction of these performance measures.

4) Develop a Trip Reduction and Travel Demand Program: The CMP contains information on currently adopted City policies and regulations which meet the requirements of this CMP element. The discussion includes the parking and transportation management regulations in the Planning Code, the Transit Impact Development Fee ordinance, and the relationship of these and other policies in promoting the region's adopted air quality transportation control measures.

The program also addresses the activities undertaken by the City since the adoption of the previous CMPs to comply with the Bay Area Air Quality Management District's (BAAQMD) Regulation 13, Rule 1. As a result of the above policies and related trip reduction activities, the City was able to reach, in 1992, trip reduction goals set by the BAAQMD in Rule 1, for the year 1999. In 1995 the City was required to demonstrate continued compliance with Rule 1. The results of the 1995 CTBS show that once again the northeast quadrant of the City including Fisherman's Wharf, the North Beach, Chinatown, the financial district, and south of Market area (the BAAQMD's Zone 1) meets the trip reduction goals for the year 1999. The remainder of the City (the BAAQMD's Zone 2) meets the trip reduction goals for the year 1997.

5) Establish a program to analyze the transportation impacts of local land use decisions: The land use analysis element of the CMP outlines the City's role as a regional employment center and its recent policies to increase residential development within the City. The existing institutional framework for land use

decision-making and the provision of transportation services is described. The potential effects of land use changes upon the transportation system are currently assessed through an exacting environmental review process. No change to existing institutional roles and the fundamentals of the development review process have occurred due to the inception of the CMP process, and none are proposed as part of this document.

6) Adopt a seven-year multimodal Capital Improvement Program: State law established that, in order to be eligible for certain State and Federal funds, transportation projects must be included in the Capital Improvement Program of the CMP. The adopted capital improvement program reflects the City's "Transit First" policy, with the largest percentage of the program devoted to transit projects. The transit portion of the program is heavily oriented to rehabilitation and replacement, since maintaining the ability to meet the current transit demand is the City's first priority. Projects which provide expanded transit service are also included and provide for ways of managing future congestion in redeveloping areas. The program also includes roadway, ferry, pedestrian, bicycle, and freight elements. Inclusion in the CIP is not sufficient to cause a project to be inplemented. CIP lists are submitted to the Metropolitan Transportation Commission for final programming decisions. As these projects are ready for implementation, appropriate environmental assessments will be conducted by the sponsoring agencies.

Review and Comment Process

The draft will be considered at a public meeting of the Authority's Plans and Programs Committee scheduled for October 16, 1995 at 401 Van Ness Avenue, Room 410. Approval of the final Negative Declaration and adoption of the final 1995 San Francisco CMP will take place at a public hearing scheduled for the Authority's regular meeting of November 20, 1995 at 401 Van Ness Avenue. Copies of the Draft 1995 San Francisco CMP and Preliminary Negative Declaration are available for review at the Authority offices at 100 Van Ness Avenue, 25th Floor, and at the Reference Desk of the Main San Francisco Library at 200 Larkin Street. Comments should be forwarded to the Authority at 100 Van Ness Avenue, 25th Floor San Francisco, CA 94102, Attention: José Luis Moscovich by 5:00 p.m. on November 10, 1995.

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Appendix I

ENVIRONMENTAL CHECKLIST FORM

1. Project title: 1995 San Francisco Congestion Management Program

2. Lead agency name and address:
San Francisco County Transportation Authority, 100 Van Ness Avenue,
25th Floor, San Francisco, CA 94102

3. Contact person and phone number:
Jose Luis Moscovich, Director of Congestion Management @ (415) 557-6857

4. Project location:
Entire City and County of San Francisco

5. Project sponsor's name and address:
San Francisco County Transportation Authority, 100 Van Ness Avenue,
25th Floor, San Francisco, CA 94102

6. General plan designation:
n/a - project is programmatic in nature

7. Zoning:
n/a

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The project is the proposed adoption of the 1995 San Francisco Congestion Management Program. Section 65089 of the California Code requires urban counties to adopt a congestion management program in order to maitain eligibility for certain State and Federal transportation funding. The intent of the program is to integrate transportation, land use, and air quality planning and programs. The 1995 CMP also includes a list of recommended projects in the Capital Improvement Program, but inclusion in the Capital Improvement Program is not sufficient to cause projects to be implemented.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

The 1995 CMP applies to the entire City and County of San Francisco. Since the CMP is programmatic in nature, description of surrounding land uses and setting is not directly relevant.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

The Metropolitan Transportation Commission (MTC) must find the 1995 San Francisco CMP document in conformance with regional guidelines. MTC also has the final decision on the programming of State and Federal funds for projects listed in the Capital Improvement Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Land Use and Planning**
☐ **Population and Housing**
☐ **Geological Problems**
☐ **Water**
☐ **Air Quality**
☐ **Transportation/Circulation**
☐ **Biological Resources**
☐ **Energy and Mineral Resources**
☐ **Hazards**
☐ **Noise**
☐ **Mandatory Findings of Significance**
☐ **Public Services**
☐ **Utilities and Service Systems**
☐ **Aesthetics**
☐ **Cultural Resources**
☐ **Recreation**

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature

Date 10/10/95

Printed name José Luis Moscovich

For San Francisco County Transportati
Authority

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

See attached Initial Study for further detail.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses are discussed in Section XVII at the end of the checklist.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. See the sample question below. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) This is only a suggested form, and lead agencies are free to use different ones.

Sample Question:

Issues (and Supporting Information Sources): *Would the proposal result in potential impacts involving:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Landslides or mudslides? (1, 6)	☐	☐	☐	☒

(Attached source list explains that 1 is the general plan, and 6 is a USGS topo map. This answer would probably not need further explanation.)

ENVIRONMENTAL IMPACTS:

I. LAND USE AND PLANNING. *Would the proposal:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Conflict with general plan designation or zoning? (*Source #:*)	☐	☐	☐	☒
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project? ( )	☐	☐	☐	☒
c) Be incompatible with existing land use in the vicinity? ( )	☐	☐	☐	☒
d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)? ( )	☐	☐	☐	☒
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? ( )	☐	☐	☐	☒
II. POPULATION AND HOUSING. *Would the proposal:*				
a) Cumulatively exceed official regional or local population projections? ( )	☐	☐	☐	☒
b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? ( )	☐	☐	☐	☒
c) Displace existing housing, especially affordable housing? ( )	☐	☐	☐	☒
III. GEOLOGIC PROBLEMS. *Would the proposal result in or expose people to potential impacts involving:*				
a) Fault rupture? ( )	☐	☐	☐	☒
b) Seismic ground shaking? ( )	☐	☐	☐	☒
c) Seismic ground failure, including liquefaction? ( )	☐	☐	☐	☒
d) Seiche, tsunami, or volcanic hazard? ( )	☐	☐	☐	☒
e) Landslides or mudflows? ( )	☐	☐	☐	☒
f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? ( )	☐	☐	☐	☒
g) Subsidence of land? ( )	☐	☐	☐	☒
h) Expansive soils? ( )	☐	☐	☐	☒
i) Unique geologic or physical features? ( )	☐	☐	☐	☒

IV. WATER. *Would the proposal result in:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? ( )	☐	☐	☐	☒
b) Exposure of people or property to water related hazards such as flooding? ( )	☐	☐	☐	☒
c) Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity? ( )	☐	☐	☐	☒
d) Changes in the amount of surface water in any water body? ( )	☐	☐	☐	☒
e) Changes in currents, or the course or direction of water movements? ( )	☐	☐	☐	☒
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability? ( )	☐	☐	☐	☒
g) Altered direction or rate of flow of groundwater? ( )	☐	☐	☐	☒
h) Impacts to groundwater quality? ( )	☐	☐	☐	☒
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies? ( )	☐	☐	☐	☒
V. AIR QUALITY. *Would the proposal:*				
a) Violate any air quality standard or contribute to an existing or projected air quality violation? ( )	☐	☐	☐	☒
b) Expose sensitive receptors to pollutants? ( )	☐	☐	☐	☒
c) Alter air movement, moisture, or temperature, or cause any change in climate? ( )	☐	☐	☐	☒
d) Create objectionable odors? ( )	☐	☐	☐	☒
VI. TRANSPORTATION/CIRCULATION. *Would the proposal result in:*				
a) Increased vehicle trips or traffic congestion? ( )	☐	☐	☐	☒
b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ( )	☐	☐	☐	☒
c) Inadequate emergency access or access to nearby uses? ( )	☐	☐	☐	☒
d) Insufficient parking capacity onsite or offsite? ( )	☐	☐	☐	☒
e) hazards or barriers for pedestrians or bicyclists? ( )	☐	☐	☐	☒
f) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ( )	☐	☐	☐	☒
g) Rail, waterborne or air traffic impacts? ( )	☐	☐	☐	☒
VII. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*				
a) Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds? ( )	☐	☐	☐	☒
b) Locally designated species (e.g., heritage trees)? ( )	☐	☐	☐	☒
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)? ( )	☐	☐	☐	☒
d) Wetland habitat (e.g., marsh, riparian, and vernal pool)? ( )	☐	☐	☐	☒
e) Wildlife dispersal or migration corridors? ( )	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. ENERGY AND MINERAL RESOURCES. *Would the proposal:*				
a) Conflict with adopted energy conservation plans? ( )	☐	☐	☐	☒
b) Use nonrenewable resources in a wasteful and inefficient manner? ( )	☐	☐	☐	☒
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? ( )	☐	☐	☐	☒
IX. HAZARDS. *Would the proposal involve:*				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation)? ( )	☐	☐	☐	☒
b) Possible interference with an emergency response plan or emergency evacuation plan? ( )	☐	☐	☐	☒
c) The creation of any health hazard or potential health hazard? ( )	☐	☐	☐	☒
d) Exposure of people to existing sources of potential health hazards? ( )	☐	☐	☐	☒
e) Increased fire hazard in areas with flammable brush, grass, or trees? ( )	☐	☐	☐	☒
X. NOISE. *Would the proposal result in:*				
a) Increases in existing noise levels? ( )	☐	☐	☐	☒
b) Exposure of people to severe noise levels? ( )	☐	☐	☐	☒
XI. PUBLIC SERVICES. *Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:*				
a) Fire protection? ( )	☐	☐	☐	☒
b) Police protection? ( )	☐	☐	☐	☒
c) Schools? ( )	☐	☐	☐	☒
d) Maintenance of public facilities, including roads? ( )	☐	☐	☐	☒
e) Other government services? ( )	☐	☐	☐	☒
XII. UTILITIES AND SERVICE SYSTEMS. *Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:*				
a) Power or natural gas? ( )	☐	☐	☐	☒
b) Communications systems? ( )	☐	☐	☐	☒
c) Local or regional water treatment or distribution facilities? ( )	☐	☐	☐	☒
d) sewer or septic tanks? ( )	☐	☐	☐	☒
e) Storm water drainage? ( )	☐	☐	☐	☒
f) Solid waste disposal? ( )	☐	☐	☐	☒
g) Local or regional water supplies? ( )	☐	☐	☐	☒
XIII. AESTHETICS. *Would the proposal:*				
a) Affect a scenic vista or scenic highway? ( )	☐	☐	☐	☒
b) Have a demonstrable negative aesthetic effect? ( )	☐	☐	☐	☒
c) Create light or glare? ( )	☐	☐	☐	☒

XIV. CULTURAL RESOURCES. *Would the proposal:*

	Potentially Significant Impact	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Disturb paleontological resources? ( )	☐	☐	☐	☒
b) Disturb archaeological resources? ( )	☐	☐	☐	☒
c) Have the potential to cause a physical change which would affect unique ethnic cultural values? ( )	☐	☐	☐	☒
d) Restrict existing religious or sacred uses within the potential impact area? ( )	☐	☐	☐	☒

XV. RECREATION. *Would the proposal:*

a) Increase the demand for neighborhood or regional parks or other recreational facilities? ( )	☐	☐	☐	☒
b) Affect existing recreational opportunities? ( )	☐	☐	☐	☒

XVI. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☐	☒
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

XVII. EARLIER ANALYSES.

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) **Earlier analyses used.** Identify earlier analyses and state where they are available for review.

b) **Impacts adequately addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) **Mitigation measures.** For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which are incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

Authority: Public Resources Code Sections 21083 and 21087.
Reference: Public Resources Code Sections 21080(c), 21080.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

CALIFORNIA DEPARTMENT OF FISH AND GAME

CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

Project Title/Location (include county):

1995 San Francisco Congestion Management Program -
City and County of San Francisco.

Project Description:

Adoption of a state-mandated program for integration of transportation, land use, and air quality planning and programming.

Findings of Exemption (attach as necessary):

See attached Preliminary Negative Declaration.

Certification:

I hereby certify that the public agency has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Jose Luis Moscovich
(Chief Planning Official)

Title: Dir. of Congestion Management
Lead Agency SF County Transportat. Author
Date 10/10/95

Section 711.4, Fish and Game Code
DFG:12/90

NOTICE OF PUBLICATION
OF
PRELIMINARY NEGATIVE DECLARATION

On October 11, 1995 the San Francisco County Transportation Authority published a preliminary negative declaration for the 1995 San Francisco Congestion Management Program (CMP). Development and approval of this CMP is needed to maintain eligibility for certain State and Federal transportation funding sources. The purpose of the CMP is to integrate transportation, land use, and air quality planning and programming for the City and County of San Francisco. An Initial Study has been prepared and a Preliminary Negative Declaration issued which states that the proposed adoption of this CMP could not have a significant effect on the environment. These documents are available for review at the Authority offices at 100 Van Ness Avenue, 25th Floor and at the Main Library, 200 Larkin Street. Comments should be forwarded to the Authority at 100 Van Ness Avenue, 25th Floor, San Francisco, CA 94102, Attention: José Luis Moscovich by 5:00 p.m. on November 10, 1995.

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